

HYDROLOGIC DATA IN SMALL WATERSHEDS, COAL-MINING REGION, WEST-CENTRAL
INDIANA, OCTOBER 1980 TO JUNE 1983, AND INSTRUMENTATION AND METHODS OF
COLLECTING THE DATA

By Danny E. Renn, Richard F. Duwelius, Charles R. Keeton,
and John W. Tyler Jr.

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FACTORS FOR CONVERTING INCH-POUND UNITS TO THE INTERNATIONAL
SYSTEM OF UNITS (SI)

<u>Multiply inch-pound units</u>	<u>By</u>	<u>To obtain SI units</u>
inch (in.)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
square foot (ft^2)	0.0929	square meter (m^2)
square mile (mi^2)	2.590	square kilometer (km^2)
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
cubic foot per second per square mile [$(ft^3/s)/mi^2$]	0.01093	cubic meter per second per square kilometer [$(m^3/s)/km^2$]

EXPLANATION OF TERMS, SYMBOLS, AND ABBREVIATIONS USED IN TABLES 2 THROUGH 9

Calories PE	calories per square centimeter per day
deg. C	degree Celsius
E.	east
lat	latitude
long	longitude
MPH	miles per hour
N.	north
PVC	polyvinyl chloride
R.	range
S.	south
sec.	section
T.	township
W.	west

REMARKS: Degree of accuracy of the records.

Good: About 95 percent of the daily discharges are within 10 percent.

Fair: About 95 percent of the daily discharges are within 15 percent.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

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ABSTRACT

Hydrologic data were collected in seven watersheds ranging in area from 0.11 to 4.87 square miles. Principal uses of land include farming in two of the watersheds, farming and forestry in one, farming and unreclaimed surface coal mines in one, reclaimed surface coal mines in two, and an unreclaimed surface coal mine in one.

Methods and instrumentation used in collecting samples and measuring concentrations and properties of the following types of data are described in the text: streamflow in seven watersheds; ground-water levels in 46 wells in unconsolidated material and 12 wells in bedrock in or near the watersheds; precipitation in seven watersheds; solar radiation, relative humidity, wind speed, and temperature of air and soil at one location; and pH, specific conductance, temperature of water, and concentrations of selected chemical constituents and suspended sediment in two watersheds.

INTRODUCTION

The need for collecting additional hydrologic data in coal-mining areas was created by the Surface Mining Control and Reclamation Act of 1977 (public law 95-87). Although considerable hydrologic data were already available, most data had been collected in large rather than in small watersheds. To address this lack of data, the U.S. Geological Survey collected hydrologic data in seven small watersheds of the coal-mining region in west-central Indiana from October 1980 to June 1983.

Area of Study

The area includes seven small watersheds in Clay, Owen, Sullivan, and Vigo Counties (fig. 1), west-central Indiana. Area of the watersheds ranges from 0.11 to 4.87 mi² (square miles). All the watersheds are underlain by rocks of Pennsylvanian age (fig. 1), which are composed of cyclic sequences of dominantly clastic shale, siltstone, and sandstone intermixed with thin,

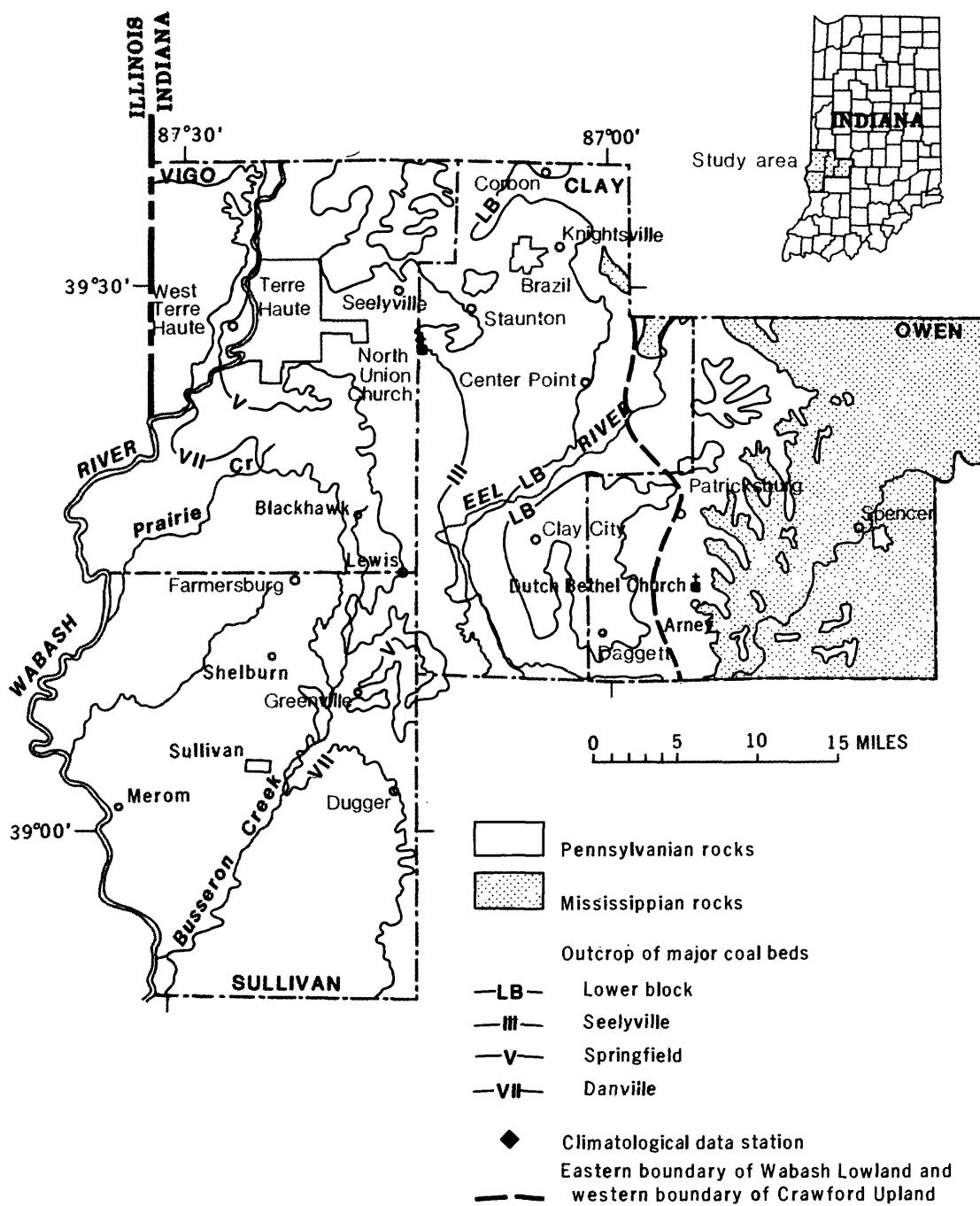


Figure 1.-- Location of study area, coal-mining region, west-central Indiana.

widespread beds of coal, clay, limestone, and black shale (Gray, 1979, p. K1). The rocks have nearly horizontal bedding plains and dip southwest at 20 to 30 ft/mi., thus the lower beds outcrop farther to the east than the upper beds (fig. 1). A generalized geologic column of the Pennsylvania System in Indiana is given in Figure 2.

Six of the seven watersheds--unnamed tributary to Honey Creek, Big Slough, Hooker Creek, unnamed tributary to Sulphur Creek, unnamed tributary to Big Branch, and Pond Creek--are in the Wabash Lowland physiographic unit (fig. 1). The area, whose topography is controlled by nonresistant shale and siltstone and extensive glacial deposits of the Pleistocene Epoch, consists of wide, flat floodplains and rolling to undulating upland areas of slight slopes (Schneider, 1966, p. 48-49).

One watershed, Beech Creek, is in the Crawford Upland physiographic unit (fig. 1). At its western edge, the topography of the Crawford Upland is controlled primarily by resistant sandstone beds of the Mansfield formation and, secondarily, by glacial deposits of the Pleistocene Epoch. The Crawford Upland is an area of steep-sided narrow ridges and well-developed and entrenched dendritic drainage systems (Schneider, 1966, p. 48).

Uses of Land in Watersheds

Seven watersheds ranging in size from 0.11 to 4.87 mi² were selected for study. The four major land uses in these watersheds are: a mixture of forest (42 percent) and farming (58 percent) in Beech Creek (fig. 3); farming in Big Slough (fig. 4) and Hooker Creek (fig. 5); reclaimed surface mines in unnamed tributary to Honey Creek (fig. 6) and unnamed tributary to Sulphur Creek (fig. 7); a mixture of farming (57 percent) and unreclaimed surface mines (43 percent) in Pond Creek (fig. 8); unreclaimed surface mine in unnamed tributary to Big Branch (fig. 9).

INSTRUMENTATION AND METHODS

Surface-Water Data

Streamflow

Streamflow data were collected at all seven sites. The locations of the streamflow gaging stations are shown in figures 3-9. Continuous streamflow data were determined from the relation of stage and streamflow. Streamflow

SERIES	GROUP (Thickness in feet)	FORMATION	COAL	COAL MEMBER OR BED
Conemaugh	McLeansboro (600)	Mattoon	—	
		Bond	—	Fairbanks Parker
		Patoka	—	Ditney
		Shelburn	—	
Allegheny	Carbondale (300)	Dugger	—	Danville (VII) Hymera (VI)
		Petersburg	—	Springfield (V) Houchin Creek (IVa)
		Linton	—	Survant (IV) Colchester (IIIa) Seelyville (III)
		Staunton	—	
Pottsville	Raccoon Creek (550)	Brazil	—	Minshall and Buffaloville Upper Block Lower Block Shady Lane Mariah Hill Blue Creek
		Mansfield	—	Pinnick St. Meinrad French Lick

Modified from Wier, 1973, fig. 3, p. 5.

Figure 2-- Generalized geologic column of the Pennsylvanian System,
coal-mining region, west-central Indiana.

was measured with a Price vertical-axis AA¹ or pygmy meter. Additional measuring devices were installed at three stations to ensure accuracy of data at low flow. The devices at the three stations were: a 90° (degree) V-notch weir at unnamed tributary to Big Branch; A Manning fiberglass parshall flume with a throat of 2-foot width at unnamed tributary to Honey Creek; and a concrete V-notch weir calibrated by blocking flow and then releasing the water and making streamflow measurements on the recession at unnamed tributary to Sulphur Creek.

General methods used are outlined in Carter and Davidian (1968). Stage was sensed by a float in a stilling well connected to the stream by intake pipes. The float was connected by a counter-weighted metal tape to a Stevens digital water-stage recorder. The recorder punched coded values of stage on a paper tape at preselected intervals. In addition, at two stations, Pond Creek and Hooker Creek, Stevens A-35 strip chart recorders were installed as back-ups. A shifting-control method was used to correct for the stage-streamflow relationships that were subject to change because of frequent change in the physical features that form the stream control. For days that streamflow record was unavailable, either due to failure of equipment or effects of ice, data were computed by one of three methods; backup recorders, comparing records of streamflow for other stations in the same or nearby basins, or an occasional winter streamflow measurement. The equipment installed at the streamflow stations is listed in table 1. Data collected at the streamflow gaging stations and a description of site locations are presented in table 2.

Quality of Surface Water

Surface-water samples were collected at Hooker Creek and Pond Creek (figs. 5 and 8) and analyzed for various chemical constituents. The sampling sites were at or near streamflow gaging stations. Methods by Skougstad and others (1979) were used for collection and analysis of the samples. Chemical analyses of the surface-water samples and a description of site locations are presented in table 3.

At the two sites, specific conductance, pH, and temperature of water were measured by U.S. Geological Survey continuous flow-thru water-quality monitors. The monitors were custom fabricated by the Geological Survey Hydrologic Instrumentation Facility. Water was supplied to the monitors by a 3/4 horsepower pump (Prosser Industries model 9-1011) which was enclosed in a metal shelter in the stream. Water was pumped from the stream to a 5-gallon, continuous-flow, holding tank equipped with sensors for measuring specific conductance, pH, and temperature of water. Residence time in the tank was approximately one-half minute. The pump was stage activated to prevent it

¹Use of brand and firm trade names in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

from overheating during periods of little or no flow. Thus, no data are available for these periods. Data for the three variables and a description of site locations are presented in table 4.

Ground-Water Data

Water levels in 2- and 4-inch diameter observation wells were measured at 11 continuous recording and 47 non-recording sites (figs. 3-9). Forty-six wells in unconsolidated material were drilled by the Geological Survey using, hollow stem augers. PVC (polyvinyl chloride) water-well casing and screens were used for both sizes. The 2 inch diameter screens were 2 ft in length, and the 4 inch diameter screens were 5 ft in length. The annulus around the screen was backfilled with pea-gravel to facilitate flow into the screen and to help prevent plugging of the screen openings with fine-grained materials. The remainder of the hole was backfilled with drill cuttings from the hole. After completion, the wells were slug-tested.

Twelve bedrock wells were drilled by commercial drillers under contract to the Geological Survey. Standard mud-rotary methods were used to a depth where the casing was to be set. Five-inch diameter PVC water-well casing was set in the hole and was sealed into the rock by a rubber shale shield or packer. The remainder of the hole was air hammered. After completion, the bedrock wells were pumped.

Equipment at continuous recording sites consisted of a float in the well attached by a counter-weighted cable to a Stevens digital water-stage recorder housed in a 2 ft x 2 ft x 2 ft aluminum shelter. The recorder punched coded values of water-levels on a paper tape at 1-hour intervals. Water-level data and a description of these sites are presented in table 5. A description of non-recording sites is presented in table 6, and data collected at these sites are presented in table 7.

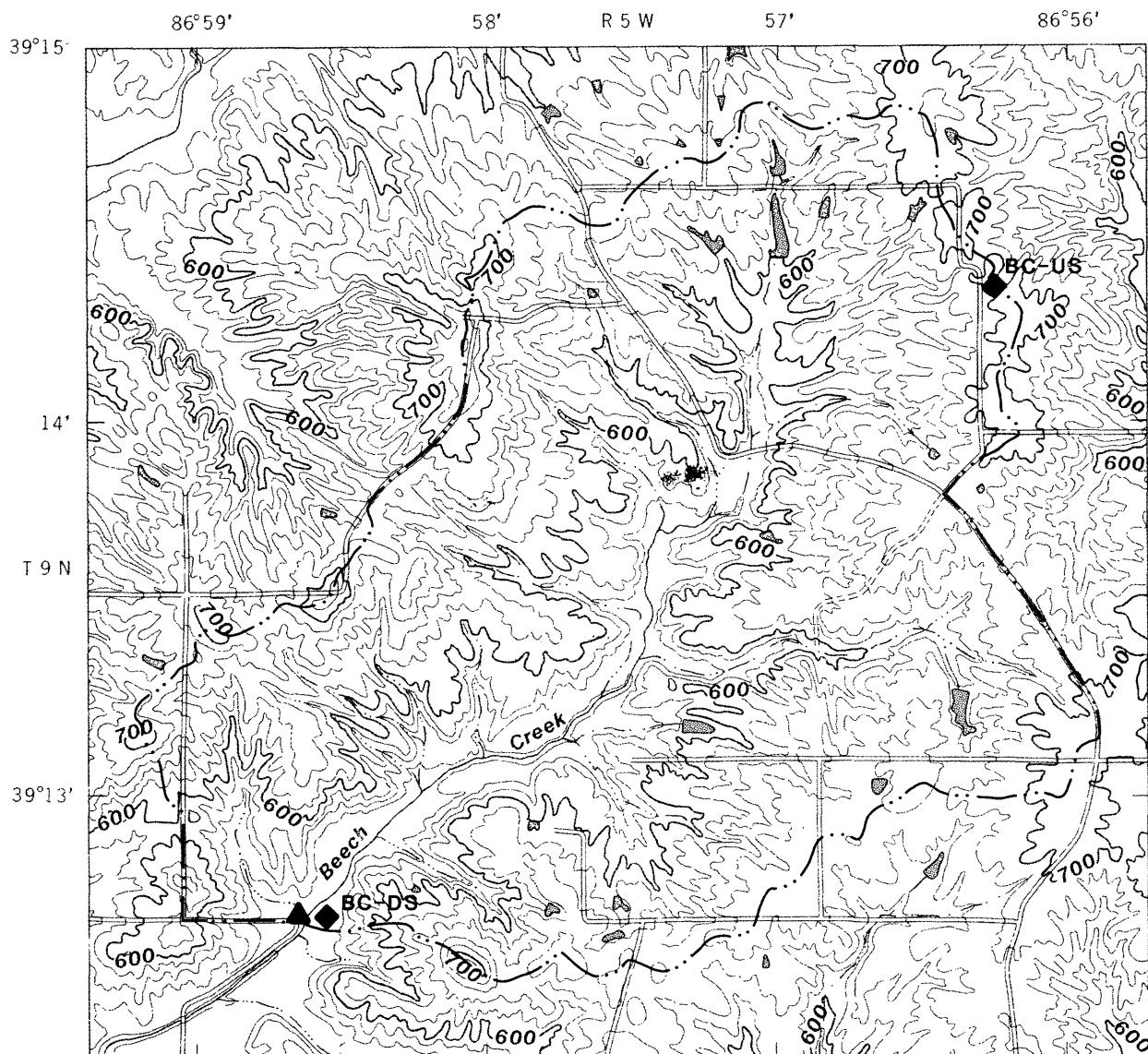
Precipitation Data

Precipitation data were collected at 10 sites: two in each of Beech Creek, Hooker Creek and Big Slough watersheds and one in each of the remaining four watersheds. The locations of the rain gages are shown in figures 3-9. Each rain gage consisted of a 2 ft x 2 ft x 2ft aluminum shelter attached to a 6 in. x 6 in. wood post. The shelters were 8 to 10 ft off the ground and away from nearby vegetation so that collection of precipitation would not be affected. After interception by a 7.5 inch diameter metal funnel on top of the shelter, precipitation was routed by plastic tubing into a 3 inch diameter PVC pipe that was attached to the wood post. During the months when temperature was at or below freezing, alcohol was added to the tubes to prevent freezing. The changes in the amount of water in the pipe were sensed by a 2.5 inch diameter plastic float that was connected by a counter-weighted cable to a Stevens digital water-stage

recorder. The recorder punched coded values of precipitation on a paper tape at 5-minute intervals. Precipitation data and a description of site locations are presented in table 8.

Climatological Data

Climatological data were collected at one location in the study area (fig. 1). Temperature of air, solar radiation, wind speed, relative humidity and soil temperature were measured. The data-collection system consisted of a controller with a data-storage unit and a group of sensors. The controller and data-storage unit were housed in an 8 ft × 12 ft × 8 ft cedar mini-barn, which was heated to prevent the temperature inside from dropping below 10° C. A data-logging microcomputer (Campbell Scientific model CR21) with a model CR56 power supply was used to control all data-collection activities. This instrument is capable of monitoring the various sensors used, calculating daily and hourly sums and averages, printing the data at pre-selected intervals, and transferring the data to cassette magnetic tape for storage. A cassette recorder (Panasonic model RQ-337) was used for data storage. Temperature probes (Campbell Scientific model 101) containing thermistors (Fenwall Electronics UUT-51J1) were used to measure temperature of air and soil. A solar-radiation pyranometer (Li-Cor) was used to measure solar radiation. A wind speed sensor (Campbell Scientific model 014A) was used to measure wind velocity. Relative humidity was measured with a sensor (Campbell Scientific model 201) containing a relative humidity sensor (Phys-Chemical Research model PCRC-11) and a thermistor (Fenwall Electronics UUT-51J1). The climatological data collected and a description of the site are given in table 9.



Base from U.S. Geological Survey
Arney 1:24,000, i966

0 1 2 MILES
CONTOUR INTERVAL 20 FEET

EXPLANATION

- ▲ Streamflow-measurement station
- ◆ Precipitation-measurement station and designation

Figure 3.-- Locations of data-collection sites in Beech Creek watershed,
coal-mining region, west-central Indiana.

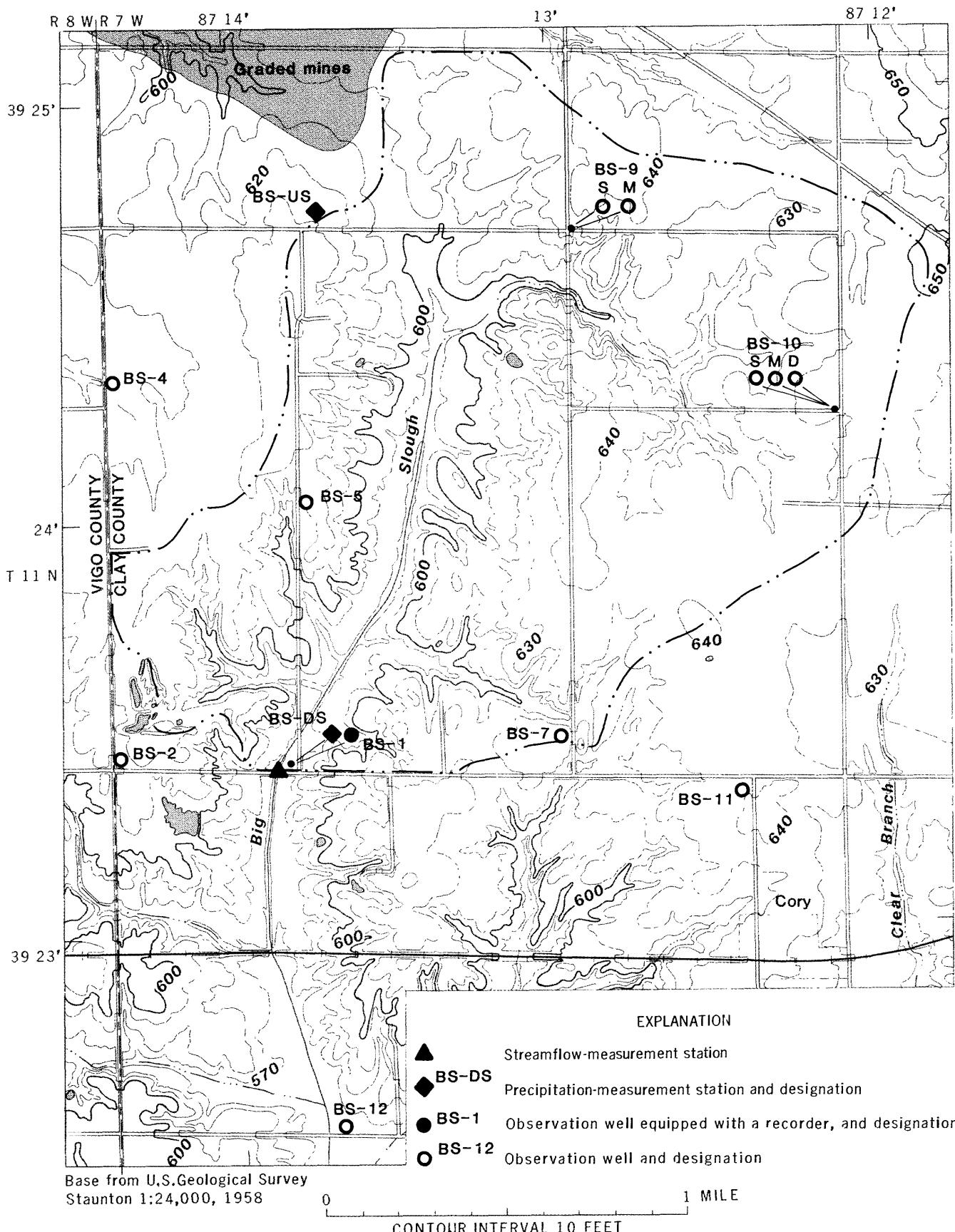


Figure 4.-- Locations of data-collection sites in Big Slough watershed, coal-mining region, west-central Indiana.

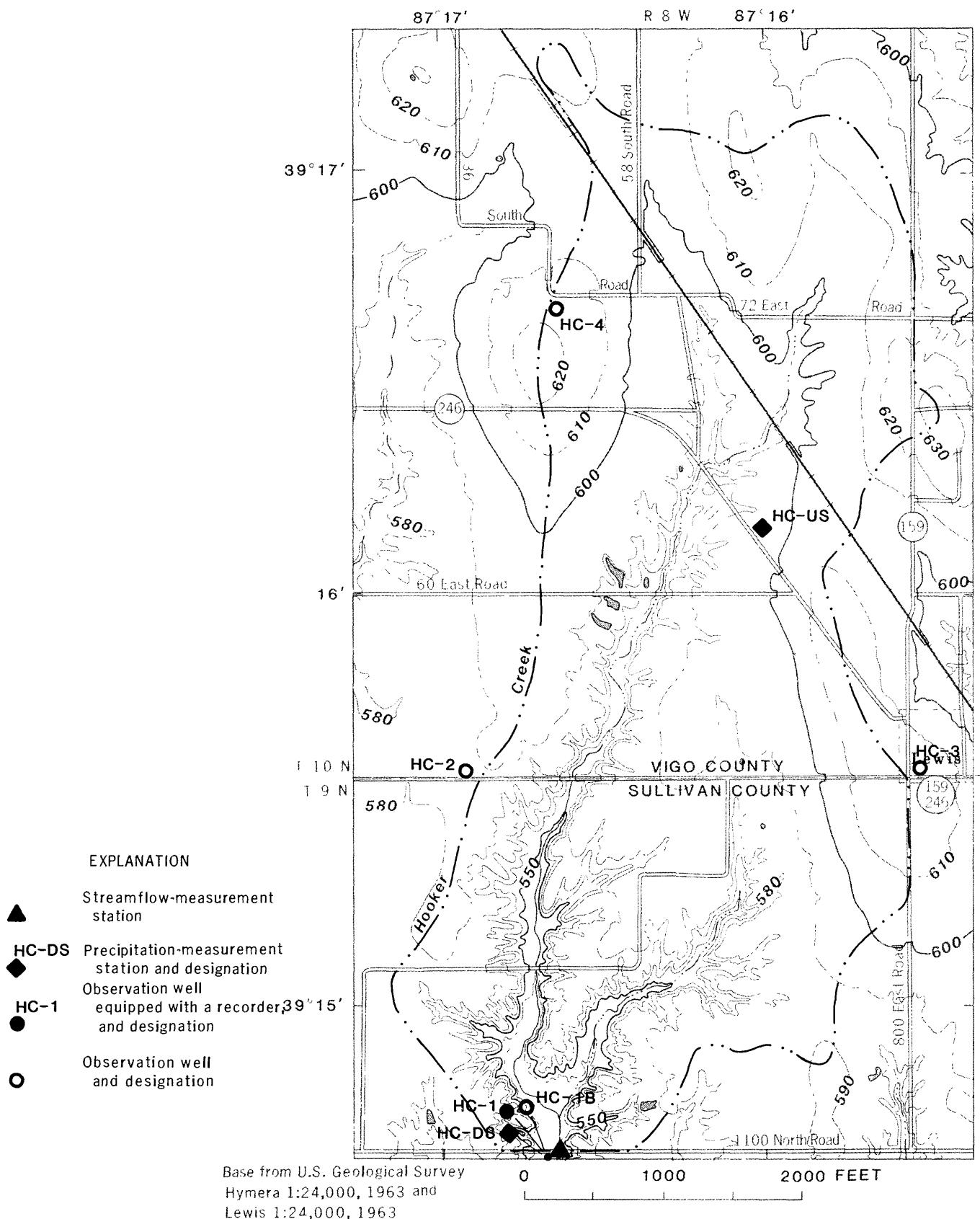
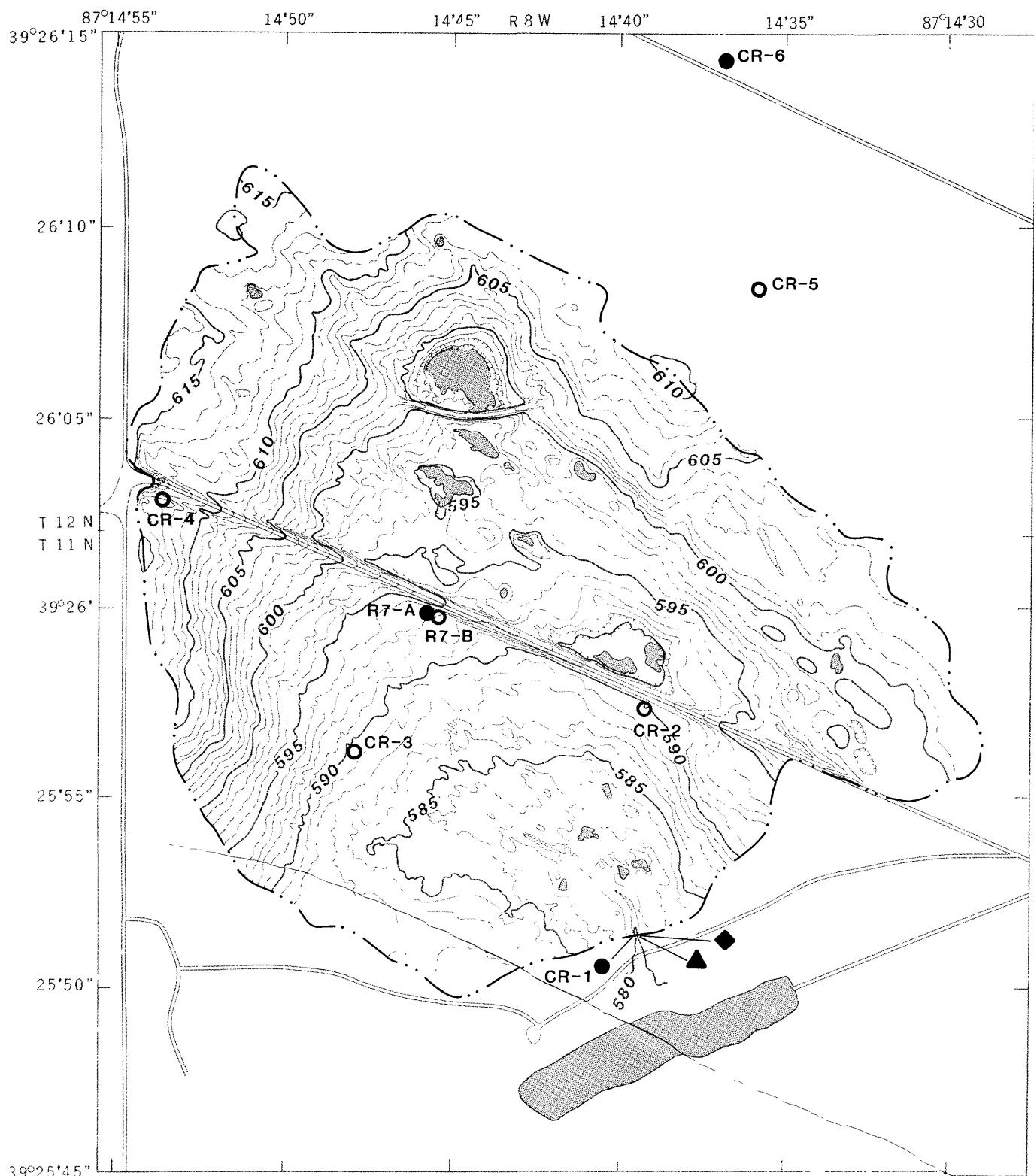


Figure 5.-- Locations of data-collection sites in Hooker Creek watershed, coal-mining region, west-central Indiana.



0 200 400 600 800 FEET
CONTOUR INTERVAL 1 FOOT

EXPLANATION

- ▲ Streamflow-measurement station
- ◆ Precipitation-measurement station

- R-7A Observation well equipped with a recorder, and designation
- CR-2 Observation well and designation

Figure 6.-- Locations of data-collection sites in watershed of unnamed tributary to Honey Creek, coal-mining region, central Vigo County, Indiana.

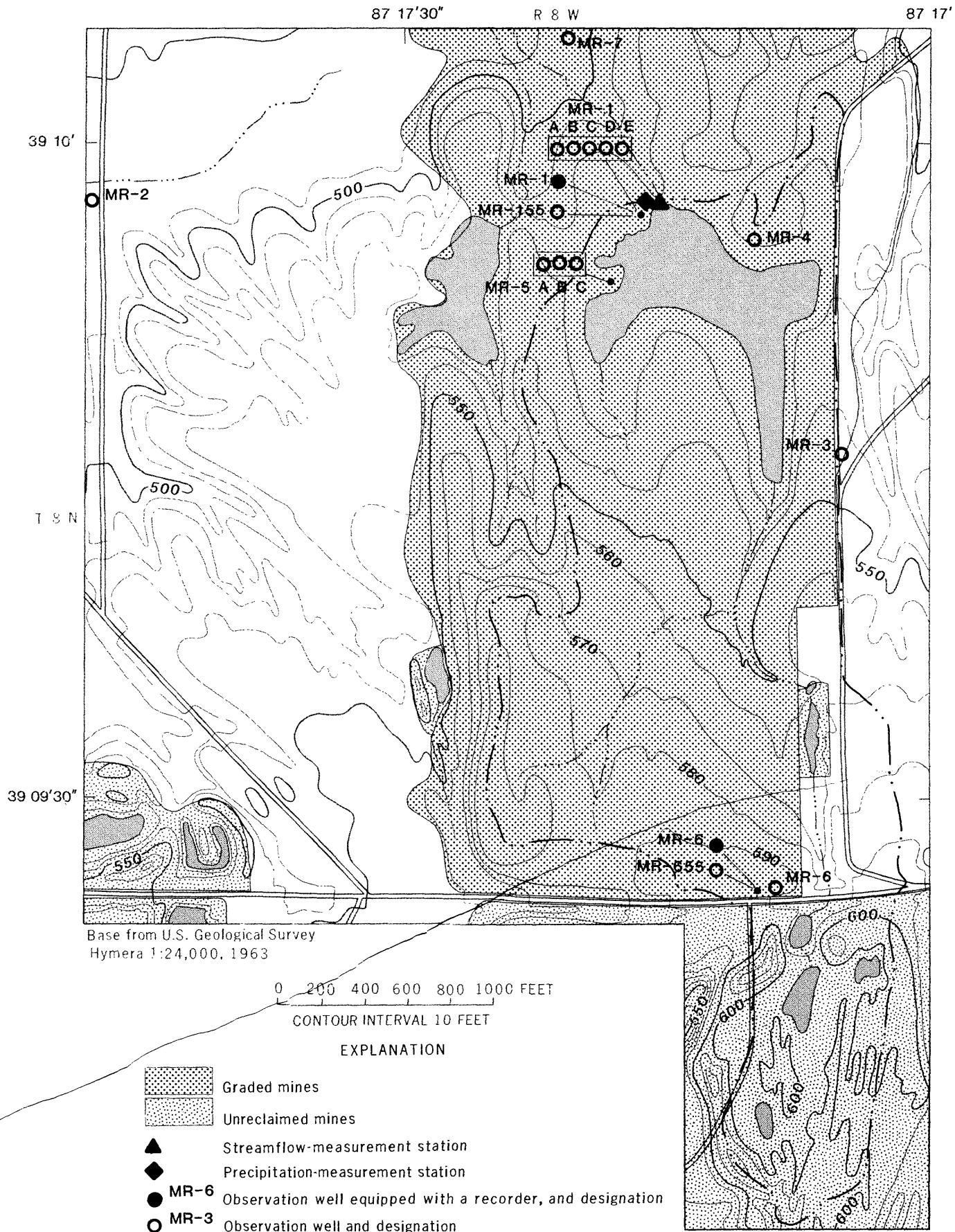
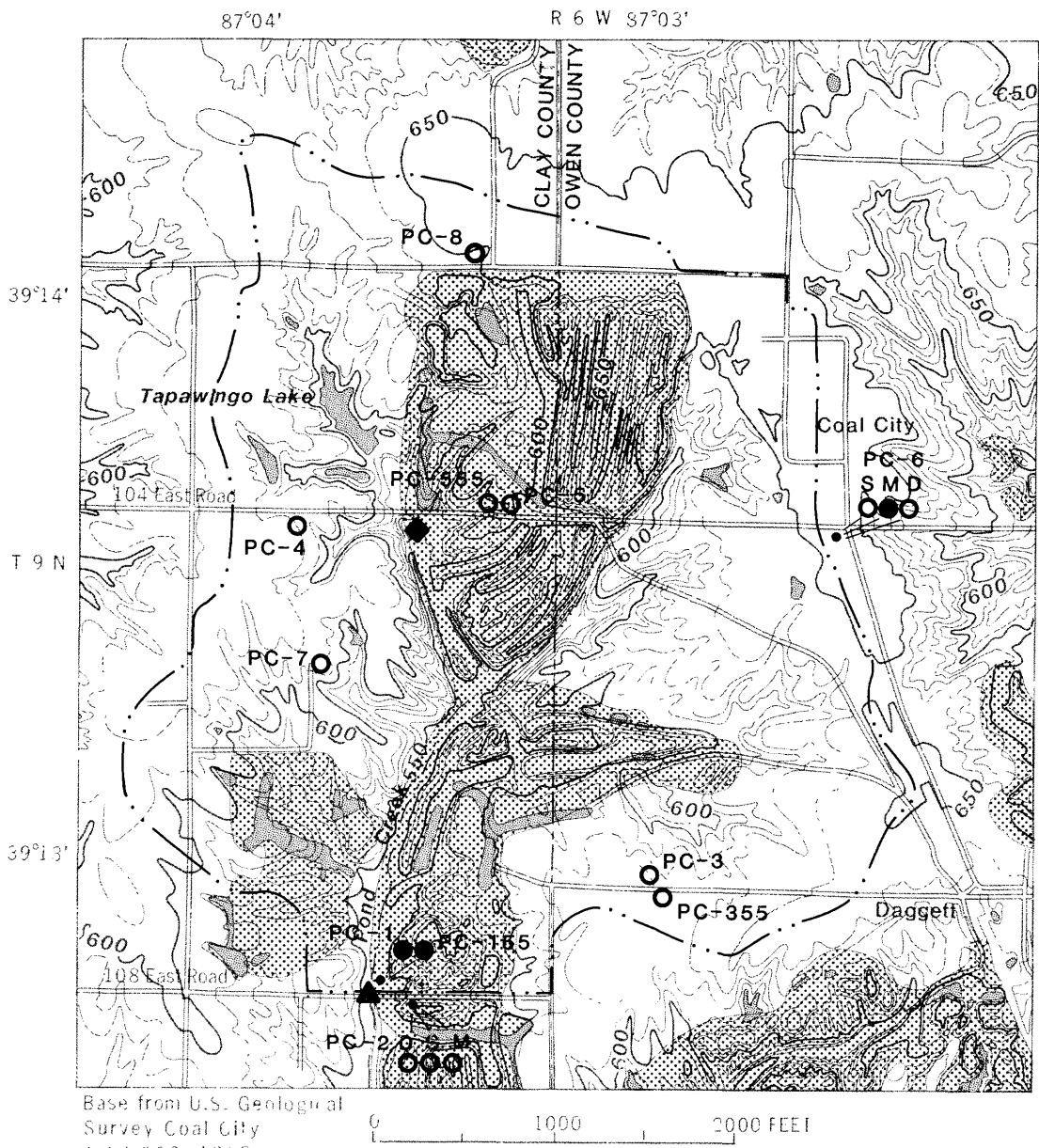


Figure 7.-- Locations of data-collection sites in watershed of unnamed tributary to Sulphur Creek, coal-mining region, west-central Indiana.



EXPLANATION

- Unreclaimed mines
- ▲ Streamflow-measurement station
- ◆ Precipitation-measurement station
- PC-1 Observation well equipped with a recorder, and designation
- PC-3 Observation well and designation
- PC-6 SMD

Figure 8.-- Locations of data-collection sites in Pond Creek watershed, coal-mining region, west-central Indiana.

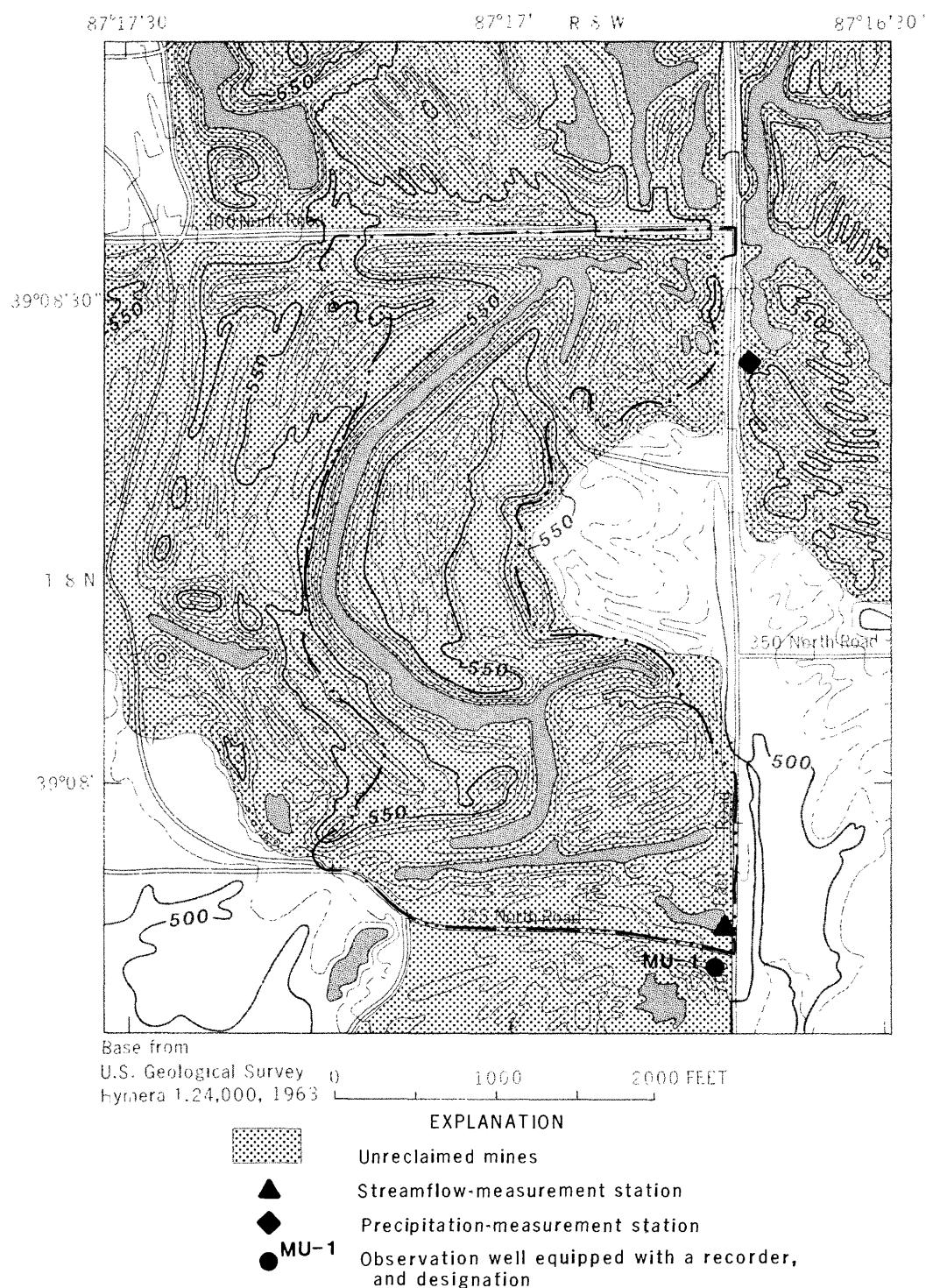


Figure 9.-- Locations of data-collection sites in watershed of unnamed tributary to Big Branch, coal-mining region, west-central Indiana.

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Weir, C. E., 1973, Coal resources of Indiana: Indiana Department of Natural Resources, Geological Survey Bulletin 42-I, 40 p.

Tables 1-9

Table 1.--Equipment at selected stream sites, coal-mining region,
west-central, Indiana

[ETG, electric tape gage; CMP, corrugated metal pipe; PVC, polyvinyl chloride]

Site	Stevens digital recorder	Data-collection interval (minutes)	Stevens A-35 strip-chart	Staff gage	Size of shelter (ft)	Type of shelter	Diameter of well (in)	Type of well
Beech Creek	X	5	--	X	2 x 2 x 2	Aluminum	24	CMP
Big Slough	X	5	--	X	2 x 2 x 2	Aluminum	24	CMP
Hooker Creek	X	5	X	X	8 x 8 x 8	barn	48	CMP
Unnamed tributary to Honey Creek	X	5	--	--	2 x 2 x 2	Aluminum	12	PVC
Unnamed tributary to Sulphur Creek	X	5	--	--	2 x 2 x 2	Aluminum	18	CMP
Pond Creek	X	5	X	X	8 x 8 x 8	barn	48	CMP
Unnamed tributary to Big Branch	X	5	--	--	2 x 2 x 2	Aluminum	18	CMP

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana

[Footnotes are given at end of table]

03360135. BEECH CREEK NEAR COAL CITY, IN

LOCATION.--Lat $39^{\circ}12'41''$, long $86^{\circ}58'38''$, NW $\frac{1}{4}$ NNW $\frac{1}{4}$ sec. 21, T. 9 N., R. 5 W., Owen County, Hydrologic Unit 05120203, on right bank 120.0 ft downstream from bridge on unnamed county road, 4.2 miles southeast of Coal City and 2.6 miles upstream from mouth.

DRAINAGE AREA.--4.87 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to September 1981.

GAGE.--Water-stage recorder.

REMARKS.--Records fair.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.00	1.1	a2.8	a.98	a3.0	3.1	2.4	b6.4	5.5	.29	.04	b ₂ .1
2	a.00	1.0	a2.1	a.98	a2.3	2.9	2.4	5.4	4.7	.23	.02	b ₉ .6
3	a.00	.96	a1.6	a.98	a1.8	2.6	2.0	4.9	3.8	.24	.03	2.0
4	a.00	.93	a1.3	a.90	a1.6	b ₄ .7	b ₃ .6	4.5	3.1	.33	.05	.78
5	a.00	.88	a1.5	a.83	a1.3	b ₅ .1	b ₃ .9	b5.5	2.6	1.6	.88	.36
6	a.00	.85	1.8	a.80	a1.3	b7.4	2.5	b ₁ .3	2.4	.48	.91	.16
7	a.00	.87	1.8	a.73	a1.3	4.3	2.1	b ₇ .2	1.8	.28	.25	.08
8	a.00	.85	2.1	a.70	a1.3	3.3	1.9	b5.7	1.3	.20	.09	.07
9	a.00	.82	3.2	a.64	a1.3	b ₉ .3	2.9	b ₅ .8	b ₁ .4	.13	.03	.03
10	a.00	.79	2.6	a.58		2.7	b ₂ .2	a ₁ .30	b ₄ .0	.09	.05	.00
11	a.00	.76	2.2	a.56	b ₂ .3	2.5	b ₃ .0	b ₅ .1	4.4	.09	.16	.00
12	a.00	.77	2.1	a.51	b ₁ .4	2.3	b ₂ .0	b ₁ .8	2.7	.05	.08	.00
13	a.00	.78	1.9	a.50	a5.8	2.2	b ₇ .0	b ₁ .1	2.1	.05	.02	.00
14	a.00	.82	1.8	a.50	a4.6	2.0	b ₇ .0	4.0	1.5	.05	.02	.00
15	a.00	.82	1.9	a.50	a3.3	2.1	b ₄ .8	.80	.13	1.4	.00	
16	a.00	.77	1.8	a.50	b ₅ .8	2.1	2.5	b ₁ .2	.52	.18	.42	.33
17	a ₂ .5	1.3	a1.7	a.50	b ₁ .6	1.9	2.4	b ₈ .0	.40	.13	.15	.23
18	a.80	1.8	a1.5	a.60	b ₁ .0	1.8	2.2	a ₉ .7	.31	.09	.00	.07
19	a. ₃₀	1.6	a1.2	a. ₉₀	b ₉ .4	1.7	2.4	b ₂ .0	.26	a. ₁₀	.00	.03
20	a. ₂₅	1.4	a1.1	a1.2	b ₁ .1	1.7	3.3	b ₉ .4	.20	.22	.00	.03
21	a. ₂₀	1.4	a1.0	a2.0	b ₅ .5	1.6	2.2	a b ₆ .6	a ₂ .0	.16	.00	.00
22	a. ₁₅	1.3	a1.0	a1.7	b ₅ .6	1.6	b ₁ .4	5.1	4.0	.07	.00	.00
23	a. ₁₅	1.5	a1.0	a1.5	b ₁ .1	1.5	b ₆ .6	4.2	1.8	.08	.00	.00
24	a ₂ .2	a1.5	a1.0	a1.3	b ₉ .0	1.5	b ₁ .3	a ₉ .0	1.1	.09	.00	.00
25	1.5	a1.3	a1.0	a1.1	5.0	1.4	b ₈ .7	b ₆ .3	.78	.08	.00	.00
26	1.0	a.85	a1.0	a1.2	a1.1	4.0	1.5	b ₇ .1	a ₄ .5	.78	.14	.00
27	1.3	a ₂ .9	a.98	a.90	a.90	3.5	3.2	b ₅ .9	a ₁ .80	1.2	.19	.00
28	2.4	a ₈ .4	a4.8	a.98	a.0	3.4	2.3	b ₅ .3	b ₂ .0	.96	.25	.00
29	1.5	a3.8	a3.8	a.98	a.98	---	b ₂ .9	b ₁ .0	b ₁ .1	.55	.21	.18
30	1.3	---	---	a.98	a.90	---	b ₄ .8	---	b ₁ .1	.37	.14	.07
31	1.2	---	---	---	---	---	2.8	---	b ₇ .0	---	.06	.00
TOTAL	16.75	73.72	49.02	28.07	310.3	130.3	262.4	975.7	111.33	6.43	5.10	16.23
MEAN	.54	2.46	1.58	.91	11.1	4.20	8.75	31.5	3.71	.21	.16	.54
MAX	2.5	2.9	3.2	2.0	93	51	66	180	40	1.6	1.4	9.6
MIN	.00	.76	.98	.50	1.3	1.4	1.9	4.2	2.0	.05	.00	.00
AC-FIT	33	146	97	615	258	520	1940	221	13	10	32	

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03360109. BIG SLOUGH NEAR CORY, IN

LOCATION.--Lat 39°23'13", long 87°13'53", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 11 N., R. 7 W., Clay County, Hydrologic Unit 05120203, on left bank 40.0 ft upstream from State Road 46 bridge, 1.5 miles west of Cory, 3.5 miles east of Riley, and 0.5 mile east of the Clay-Vigo county line.

DRAINAGE AREA.--2.70 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to May 1983.

GAGE.--Water-stage recorder.

REMARKS.--Records good.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.10	.08	.23	a.04	.91	.45	.16	.85	1.1	.08	.07	b ₂ .7
2	a.08	.08	.23	a.03	a.40	.41	.14	.49	.90	.07	.06	b ₅ .2
3	a.08	.08	.18	a.02	a.17	.30	.58	.37	.67	.08	.09	.36
4	a.08	.07	.18	a.02	a.16	1.0	2.8	b.31	1.1	.09	.07	.17
5	a.08	.06	.18	a.02	a.14	b ₁₄	1.4	b ₅ .3	.58	.26	b ₃₃	.13
6	a.08	.06	.17	a.02	a.17	1.9	.53	b ₁₃	.58	.10	b ₄ .4	.10
7	a.08	.08	.17	a.02	a.16	.95	.39	1.4	.43	.07	.58	.10
8	a.08	.07	.24	a.02	a.14	.68	.33	.70	.32	.05	.31	.11
9	a.06	.07	.42	a.02	a.14	.60	.28	b ₂ .1	b ₉ .4	.02	.18	.08
10	a.06	.06	.40	a.02	a ₂₃	.58	2.6	b ₇₇	b ₂₉	.02	.17	.07
11	a.05	.06	.26	a.02	a ₂ .8	.49	3.6	b ₉ .8	1.4	.00	.16	.06
12	a.05	.06	.24	a.02	a.90	.44	2.6	2.4	.87	.00	.14	.05
13	a.05	.06	.20	a.02	a.45	.40	1.2	1.4	.65	.00	.14	.04
14	a.05	.06	.18	a.02	a.60	.30	.74	b ₄ .9	.53	.00	.14	.08
15	a.05	.08	.18	a.02	b ₈ .2	.30	.47	b ₃₂	.42	.03	b ₅ .9	.05
16	a.05	.06	.18	a.02	b ₃₃	.31	.44	2.0	.37	a.02	.51	.19
17	a.25	.12	.16	a.02	3.9	.29	.44	b ₅ .7	1.0	.02	.24	.11
18	a.18	.13	.16	a.04	1.9	.26	.31	.22	.00	.16	.10	.10
19	a.15	.10	.14	a.06	1.7	.24	.51	4.6	.19	.07	.13	.07
20	a.13	.08	.08	a.07	1.6	.21	.70	1.4	.19	.14	.12	.04
21	a.11	.08	.08	a.06	.90	.20	.38	.79	1.5	.00	.12	.04
22	a.10	.07	a.08	.20	1.1	.19	.25	.54	.36	.00	.09	.02
23	a.13	.10	a.09	.21	1.4	.18	b ₃₅	.43	.18	.00	.07	.02
24	a.18	.10	a.09	.26	1.6	.18	b ₁₀	.16	.00	.08	.02	.02
25	a.21	.08	.33	.77	.17	.95	3.6	.15	.00	.08	.01	
26	a.13	.07	.09	.43	.60	.16	.63	b ₈₆	2.8	.13	.00	.00
27	a.18	.67	.08	.31	.54	.16	.48	b ₄₄	.12	.17	.00	.00
28	a.68	.58	.07	.25	.53	.16	.75	3.6	.11	1.9	.18	.00
29	a.27	.44	a.06	.19	---	.18	3.9	b ₂ .0	.08	.34	.13	.24
30	a.16	.32	a.05	.18	---	.23	2.3	b ₄ .4	.09	.15	.12	.11
31	a.12	---	a.04	.17	---	.17	---	2.4	---	.10	.10	---
TOTAL	4.06	4.03	4.99	3.13	87.88	26.09	91.51	418.28	52.11	47.61	47.79	10.27
MEAN	.13	.13	.16	.10	3.14	.84	3.05	13.5	1.74	1.54	1.54	.34
MAX	.68	.67	.42	.43	3.3	14	35	86	29	44	33	5.2
MIN	.05	.06	.04	.02	.14	.16	.14	.31	.08	.00	.06	.00
AC-FIT	8.1	8.0	9.9	6.2	174	52	182	830	103	94	95	20

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.30	1.1	b3.0 a1.0	4.6 1.5	1.3 1.4	.76 .82	.37 .33	b4.4 b1.9	.16 1.0	.19 .16	b89 1.1
2	.00	.28	.62	b5.7 b39	a.60	a.80	b10	.31	b61	.15	.15	.30
3	.00	.36	.60	b35	a.57	a.66	b18	1.5	.26	.55	1.4	.17
4	.02	.46	.57	1.3	a.60	2.7	3.9	.22	.45	.73	1.6	.13
5	.11	.35	.47									
6	.22	.29	.47	a.80	a.54	1.8	2.7	.22	b75	.36	b.52	.41
7	.08	.29	.47	a.50	a.49	1.3	1.4	3.4	b9.0	.41	.16	.11
8	.05	.26	.38	a.32	a.46	.98	1.7	1.0	b9.0	.39	.13	.14
9	.04	.24	.34	a.22	a.41	.91	2.4	.52	2.2	.33	.11	.11
10	.04	.24	a.31	a.19	a.39	1.3	1.6	.36	.99	5.2	.13	.10
11	.04	.22	a.28	a.17	a.36	b29	1.4	.27	.59	1.7	.16	.10
12	.02	.21	a.26	a.15	a.35	b4.1 b21	1.2 .98	.19 .14	.49 .36	.46 .37	.11 .11	.10
13	.03	.25	a.24	a.14	a.34	a.33	2.7	.82	.12	.28	.30	.15
14	.05	.24	a.22	a.12	a.33	a.50	6.0	.75	.12	.49	.21	.10
15	.06	a.22	a.20	a.11								.12
16	.05	a.20	a.18	a.10	b33	b21	b6.6 b27	.12	b25	.16	.11	.12
17	.69	.24	a.15	a.10	b84	2.8	a.10	.10	1.8	.14	.10	.12
18	.56	.24	a.14	a.92	b28	1.8	2.4	.15	.80	b9.5	.10	.16
19	.11	.27	a.13	a.85	b18	b14	1.6	.15	.89	b63	.11	.11
20	.10	.31	a.15	a.82	b40	6.1	1.9	.11	b16	1.5	.13	.09
21	.08	.24	.40	a.95	b26	2.3	1.1	.21	2.9	.76	.16	.10
22	.25	.29	b6.9 b21	b23 b47	b12 b9.3	1.5	.86	.16	.80	1.2	.18	.08
23	.24	.39	a.35	5.2	2.3	4.6	1.2	.74	.10	.50	.62	.09
24	.25	.35	1.1	.29	1.7	.57	2.1	1.1	.67	.09	.41	.10
25												
26	.86	.49	b1.8	.34	1.5	2.6	.57	.22	.29	.32	.18	.11
27	.44	.34	b28	.29	1.4	1.4	.45	1.3	.26	.26	.27	.11
28	.35	.29	2.5	.37	1.3	1.2	.39	.27	.48	b2.9	.11	.10
29	.29	.29	1.1	.55	---	1.0	.39	b26	.39	.35	.09	.10
30	.25	1.9	.73	b103	---	1.1	.38	2.1	.28	.27	2.1	.09
31	.29	---	1.2	b9.1	---	1.0	---	b23	---	.21	.30	---
TOTAL	6.67	10.34	77.81	276.98	273.03	160.39	77.61	61.97	147.91	157.04	17.15	93.44
MEAN	.22	.34	2.51	8.93	9.75	5.17	2.59	2.00	4.93	5.07	.55	3.11
MAX	1.1	1.9	2.8	103	84	29	27	26	75	63	8.9	89
MIN	.00	.20	1.3	1.0	.33	91	.38	.06	.26	.14	.09	.08
AC-FIT	13	21	154	549	318	154	123	154	293	311	34	185

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.16	b ₁₁ 1.1	.98	b ₇ 6	.49	b ₁₀	b ₉ 8	---	---	---	---
2	.10	.49	b ₁₁	.87	b ₅₆	.47	b ₃₉	b ₁₄	---	---	---	---
3	.10	.47	b ₁₇ 6	.72	3.8	.44	6.6	b ₈ 1	---	---	---	---
4	.10	.24	b ₃₀	.63	1.3	.44	2.4	2.2	---	---	---	---
5	.11	.18	b ₂₁	.67	1.0	.61	3.0	1.5	---	---	---	---
6	.18	.18	3.4	.70	1.1	4.2	4.3	1.2	---	---	---	---
7	2.6	.17	1.6	.63	.93	1.3	5.7	1.3	---	---	---	---
8	.20	.18	1.2	.64	.82	1.0	2.0	1.2	---	---	---	---
9	1.1	.18	.97	.66	1.2	.82	5.3	.78	---	---	---	---
10	.29	.20	1.1	.76	1.6	.84	2.6	.66	---	---	---	---
11	.18	.19	1.3	.68	1.2	.79	1.8	.57	---	---	---	---
12	.19	1.4	.83	.57	.86	.71	1.5	b ₃₁	---	---	---	---
13	.16	.53	.68	.57	.84	.71	b ₄₄	2.8	---	---	---	---
14	.15	.35	.76	.65	.86	.70	b ₃₈	b ₃₀	---	---	---	---
15	.14	.29	2.5	.54	.84	.62	2.4	5.0	---	---	---	---
16	.13	.26	2.6	.41	.82	.57	1.7	2.0	---	---	---	---
17	.12	.24	1.2	.42	.78	.58	1.4	1.3	---	---	---	---
18	.12	.23	1.2	.28	.73	1.6	1.2	---	---	---	---	---
19	.12	.21	1.3	.24	.73	1.8	.98	---	---	---	---	---
20	.19	.33	1.0	.25	.65	b ₂₈	.88	---	---	---	---	---
21	.14	.46	.81	.39	.64	b ₆ 7	.81	---	---	---	---	---
22	.12	.42	.84	1.9	.65	2.0	.75	---	---	---	---	---
23	.14	6.2	b ₅₁ 1.2	1.4	.62	1.5	.70	---	---	---	---	---
24	.14	2.9	b ₈₆	1.2	.57	1.2	.60	---	---	---	---	---
25	.14	1.4	1.4	.91	.49	1.0	.53	---	---	---	---	---
26	.14	4.8	b ₄₀ 3.9	.69	.45	1.0	.51	---	---	---	---	---
27	.13	2.9	b ₁₃	.63	.46	b ₁₄	.49	---	---	---	---	---
28	.12	b ₁₅	.57	.49	4.6	.64	---	---	---	---	---	---
29	.10	3.0	2.1	1.5	---	1.9	.54	---	---	---	---	---
30	.10	1.4	1.3	3.2	---	1.6	1.3	---	---	---	---	---
31	.14	---	1.1	1.2	---	1.4	---	---	---	---	---	---
TOTAL	7.79	44.96	461.99	25.46	88.03	83.59	181.63	---	---	---	---	---
MEAN	.25	1.50	14.9	.82	3.14	2.70	6.05	---	---	---	---	---
MAX	2.6	15	176	3.2	56	28	44	---	---	---	---	---
MIN	.10	.16	.68	.24	.45	.44	.49	---	---	---	---	---
AC-FT	15	89	916	50	175	166	360	---	---	---	---	---

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03342110. HOOKER CREEK NEAR LEWIS, IN

LOCATION.--Lat 39°14'39", long 87°16'40", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 9 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 1100 North, 1.0 mile west of County Road 800 East, 1.4 miles southwest of Lewis, and 4.4 miles north of Hymera.

DRAINAGE AREA.--2.72 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to June 1983.

GAGE.--Water-stage recorder.

REMARKS.--Records good.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	a.05 a.05	.37 .33	.62 1.5	a.09 a.08	a1.8 a2.2	.55 .45	.31 .32	a1.1 a.88	.80 .57	a.00 .00	a.00 .00	a.00 a1.1	
2	.04	.32	.57	a.08	a.31	.40	.33	a.78 a.44	.44 .30	.00 .00	.00 .00	.02 .00	
3	.03	.33	.44	a.07	a.40	.75	a.68 a.40	b3.0 b.30	.00 .00	.00 .00	.00 .00	.00 .00	
4	.03	.33	a.58	a.07	a.56	.72	a.88 b4.0	b3.0 b.30	.02 .02	b1.6 b1.6	.00 .00	.00 .00	
5	.03	.33	a.58										
6	.03	.33	a.76	a.06	a.40	b2.6	.49	a2.9 a1.4	b1.7 a.51	.00 .00	.42 a.00	.00 .00	
7	.03	.33	a1.1	a.06	a.27	1.3	.45	a1.4 a.19	a.1.1 a.1.1	.00 .00	.00 .00	.00 .00	
8	.03	.33	a1.5	a.06	a.19	.95	.48 a.17	a1.1 a1.2	.35 b.94	a.00 a.00	.00 .00	.00 .00	
9	.02	.33	a2.4	a.05	a.05	.76	.54 a3.5	a66 b67	a.00 a.00	.00 .08	.00 .00	.00 .00	
10	.01	.30	a1.8	a.05		.67	1.7						
11	.00	.23	a1.4	a.05	b21	.52	1.4	a14 a.14	2.0 b2.8	a.00 a.00	.11 .00	.00 .00	
12	.00	.23	a1.2	a.05	b5.1	.49	1.5	a3.8 a2.5	a.3.8 1.2	a.00 a.00	.00 .00	.00 .00	
13	.00	.23	a.98	a.05	1.4	.49	1.1	a2.5 a.74	a.2.5 a.57	a.00 a.00	.00 .00	.00 .00	
14	.00	.23	a.77	a.05	b3.9	.42	.80 a.05	a.74 a38	a.74 a.40	a.00 a.00	.00 .00	.00 .00	
15	.00	.23	a.64		b16	.42	.55 a.05			b1.3 b1.3	.00 .00		
16	b1.6	.00	.20	a.52	a.05	b9	.41	.51 b3.0	.32 a.32	a.00 a.00	.05 a.00	.00 .00	
17	.54	.39	a.45	a.06	b7.5	.29	.51 b5.7	b1.8 a.44	a.23 a.50	a.00 a.00	.00 .00	.00 .00	
18	.15	.39	a.38	a.06	b5.7	.26	.44 b6.1	b5.2 a.66	a.13 a.19	a.00 a.00	.00 b.00	.00 .00	
19	.09	.36	a.33	a.06	b6.1	.22	.66 a.07	a.5.2 b6.1	a.09 1.1	a.00 2.1	.00 a.00	.00 b.00	
20			a.28	a.07		.19							
21	.07	.33	a.25	a.09	2.2	.17	.61 b2.7	1.3 b3.5	b1.1 a.94	.00 .23	a.00 a.00	.00 .00	
22	.06	.27	a.22	a.11	b2.7	.16	b11 a.14	b11 a.10	a.72 b8.8	.08 a.06	a.00 a.00	.00 a.00	
23	.06	.32	a.19	a.14	b.b.7	.10							
24	b1.1	.33	a.16	.26	b4.0	.10	2.1 a.14	b8.8 b5.4	a.06 a.04	.00 a.00	a.00 a.00	.00 a.00	
b1.3	.28	a.15	.22	1.4									
26	b.43	.28	a.14	.29	.93	.19	1.2 b114	b17 a.93	.03 a.00	.00 a.00	a.00 a.00	.00 .00	
27	b4.6	b4.3	a.13	.26	.76	.35 a.12	a.88 a.12	a.88 a.1.8	a.00 b2.8	.00 a.00	a.00 a.00	.00 a.00	
28	.65	2.7	a.12	.21	.63	.24 ---	.37 ---	a.1.8 a1.4	a.00 b3.5	.00 a.00	a.06 a.06	a.06 a.06	
29	.48	.95	a.11	a.12	---		.56 a.11	a.1.4 a.92	1.2 ---			---	
30	.42	---	a.10	a.11	---								
31			a.09	a.92	---								
TOTAL	12.77	17.93	19.88	3.95	190.42	56.15	39.48	431.08	84.97	.02	7.12	1.12	
MEAN	a.41	.60	.64	a.13	6.80	1.81	1.32	13.9	2.83	.001	.23	.037	
MAX	a.6	4.3	2.4	.92	.59	40	11	114	67	.02	3.5	1.1	
MIN	.00	.20	.09	.05	.17	1.0	.31	.68	.00	.00	.00	.00	
AC-FIT	25	36	39	7.8	378	111	78	855	169	.04	14	2.2	

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DAY	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES											SEP
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1	.00	.00	1.1	b ₂ .3	b ₅ .2	.81	.68	.21	b ₈ .2	.04	.00	b ₁ .52
2	.00	.00	.35	b ₄ .3	a.54	.90	.76	.16	1.1	.04	.00	b ₃ .0
3	.00	.00	.10	b ₂ .1	a.37	.90	b ₃ .0	.13	.63	b ₈ .4	.00	.50
4	.00	.00	.08	b ₁ .7	a.30	b ₆ .7	.81	.12	.46	.82	.00	.11
5	.00	.02	.07	1.3	a.26	1.7	1.1	.12	.33	.41	b ₂ .4	.04
6	.00	.03	.06	a.60	a.23	1.1	1.2	b ₁ .11	b ₁ .17	.21	.12	.03
7	.00	.06	.06	a.47	a.21	.90	.76	b ₁ .8	b ₁ .15	.12	.00	.03
8	.00	.04	.05	a.29	a.19	.66	.89	.89	1.1	b ₉ .9	.00	.02
9	.00	.04	a.04	a.19	a.18	.58	1.4	.48	.67	b ₂ .4	.00	.01
10	.00	.03	a.03	a.11	a.17	.75	1.1	.31	.43	b ₁ .11	.00	.00
11	.00	.01	a.02	a.06	a.16	b ₉ .6	.98	.18	.27	b ₄ .3	.03	.00
12	.00	.00	a.01	a.05	a.15	b ₂ .5	.78	.12	.21	.79	.00	.00
13	.00	.00	a.01	a.04	a.14	b ₂ .1	.72	.10	.16	.41	.00	.00
14	.00	.00	a.01	a.03	a.13	b ₂ .9	.80	.08	.11	.28	.00	.00
15	.00	.00	a.01	a.03	a.20	b ₁ .2	.53	.07	b.92	.20	.00	.00
16	.00	.00	a.01	a.03	a.50	b ₅ .2	b ₇ .0	.06	b ₁ .6	.13	.00	.00
17	.00	.00	a.01	a.02	a.90	b ₂ .7	b ₂ .1	.06	1.1	.08	.00	.00
18	b ₂ .0	.00	a.01	a.02	b ₂ .3	b ₆ .6	1.6	.06	.51	b ₃ .2	.06	.07
19	.09	.02	a.01	a.02	b ₁ .7	b ₆ .2	1.1	.08	b ₁ .9	b ₃ .2	.00	.00
20	.00	.04	a.01	a.02	b ₄ .0	b ₇ .0	1.2	b ₁ .3	.39	.67	.00	.00
21	.00	.02	a.30	a.03	b ₁ .6	1.7	.82	b ₃ .2	.17	.14	.00	.00
22	.00	.01	b ₄ .2	b ₂ .4	b ₇ .6	1.1	.68	b ₂ .7	.12	.08	.00	.00
23	.00	.03	b ₁ .5	b ₆ .3	b ₅ .1	.88	.56	.44	.09	.07	.00	.00
24	.00	.06	b ₆ .2	b ₇ .3	b ₃ .1	b ₇ .6	.48	.21	.07	.05	b.46	.00
25	.00	.05	1.4	a.14	1.5	b ₂ .4	.44	.12	.06	.04	.20	.00
26	.00	.06	b ₁ .1	a.11	1.1	1.5	.42	b ₁ .0	.05	.03	.00	.00
27	.00	.07	b ₂ .1	a.09	.92	.94	.30	b ₈ .1	.05	.03	.00	.00
28	.11	.12	b ₃ .5	a.08	.82	.77	.21	b ₉ .8	.76	.08	.04	.00
29	.08	.08	1.2	a.13	---	.63	.21	b ₇ .0	.07	.03	.00	.00
30	.04	.15	.57	a ₉ .0	---	.71	.21	---	.05	.01	b ₂ .3	.00
31	.02	---	.74	b ₆ .4	---	.87	---	---	---	.00	.04	---
TOTAL	2.34	.94	57.26	239.16	215.07	205.56	51.74	157.97	50.47	133.08	5.55	155.81
MEAN	.075	.031	1.85	7.71	7.68	6.63	1.74	5.10	1.68	4.29	.18	5.19
MAX	2.0	.15	21	90	90	62	21	98	16	99	2.4	152
MIN	.00	.01	.02	.13	.13	.58	.21	.06	.05	.00	.00	.00
AC-FT	4.6	114	474	427	408	103	313	100	264	11	309	

Table 2.—Streamflow at selected sites, coal-mining region, west-central Indiana—Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.04	b ₃ .7	.79	b ₁ .2	.11	b ₁ .1	a ₄ .0	.11	---	---	---
2	.00	.12	b ₉ .2	.69	b ₅ .6	.10	b ₃ .8	a ₂ .4	.08	---	---	---
3	.00	.30	b ₂ .38	.56	b ₆ .6	.09	b ₉ .7	a ₁ .7	b ₇ .2	---	---	---
4	.00	.12	b ₄ .7	.42	1.8	.07	b ₃ .5	a ₁ .7	b ₆ .1	---	---	---
5	.00	.10	b ₃ .1	.45	1.1	.30	b ₉ .3	a ₁ .5	b ₁ .7	---	---	---
6	b ₄ .32	.07	b ₈ .5	.44	1.2	b ₁ .2	b ₁ .0	a ₁ .2	b ₃ .4	---	---	---
7	b ₄ .3	.06	b ₂ .2	.41	.82	1.6	b ₁ .1	a ₉ .5	1.6	---	---	---
8	b ₄ .23	.06	2.0	.32	.71	.86	b ₃ .0	a ₈ .6	.79	---	---	---
9	b ₄ .4	.05	1.3	.32	.92	.53	b ₉ .1	a ₁ .0	.54	---	---	---
10	.46	.05	1.3	.37	1.1	.40	b ₅ .1	a ₁ .8	.29	---	---	---
11	.07	.10	1.6	.32	1.0	.33	2.7	a ₇ .7	.23	---	---	---
12	.04	.94	.88	.27	.67	.25	b ₅ .7	a ₃ .8	.16	---	---	---
13	.04	.32	.68	.25	.55	.21	b ₅ .5	a ₁ .6	.10	---	---	---
14	.02	.12	.68	.31	.56	.20	b ₄ .4	a ₁ .4	.07	---	---	---
15	.01	.07	b ₅ .1	.25	.47	.15	2.4	a ₁ .1	.07	---	---	---
16	.00	.06	b ₄ .4	.20	.45	.14	1.4	a ₁ .1	---	---	---	---
17	.00	.05	1.4	.18	.41	.15	.98	---	---	---	---	---
18	.00	.05	1.0	.13	.37	.55	.79	---	---	---	---	---
19	.00	.04	1.1	.11	.37	.80	.65	1.1	---	---	---	---
20	.04	.05	.79	.10	.25	b ₃ .8	.58	.66	---	---	---	---
21	.03	.10	.62	.20	.25	b ₁ .0	.49	.53	---	---	---	---
22	.02	.09	.73	b ₇ .0	.25	2.1	.44	b ₃ .1	---	---	---	---
23	.00	b ₄ .6	1.1	b ₂ .2	.22	1.1	.41	.88	---	---	---	---
24	.00	b ₂ .1	b ₆ .8	1.5	.15	.85	.28	.55	---	---	---	---
25	.00	.71	b ₉ .2	.96	.11	.60	.24	.41	---	---	---	---
26	.00	b ₄ .4	b ₉ .1	.64	.09	b ₁ .3	.55	.19	.24	---	---	---
27	.00	b ₃ .0	b ₄ .7	.54	.10	b ₆ .3	.20	.18	---	---	---	---
28	.01	b ₁ .7	b ₁ .8	.41	.11	1.5	.22	b ₁ .8	---	---	---	---
29	.00	b ₄ .5	b ₂ .5	b ₂ .3	---	.91	.20	.57	---	---	---	---
30	.00	2.2	1.2	b ₄ .9	---	.74	.24	---	---	---	---	---
31	.02	---	.96	.92	---	.74	---	.18	---	---	---	---
TOTAL	10.01	41.47	604.04	28.46	88.63	94.49	244.57	---	---	---	---	---
MEAN	.32	1.38	19.5	.92	3.17	3.05	8.15	---	---	---	---	---
MAX	4.4	17	238	7.0	56	38	55	---	---	---	---	---
MIN	.00	.04	.62	.10	.09	.07	.19	---	---	---	---	---
AC-FIT	20	82	1200	56	176	187	485	---	---	---	---	---

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03341568. UNNAMED TRIBUTARY TO HONEY CREEK NEAR CORY, IN

LOCATION.--Lat $39^{\circ}25'48''$, long $87^{\circ}14'34''$, in NE $\frac{1}{4}$ sec. 1, T. 11 N., R. 8 W., Vigo County, Hydrologic Unit 0512111, on Amax Coal Company's Chinook Coal Mine, along access road southwest of mine office, 3.6 miles northwest of Cory and 1.3 miles south-southwest of North Union Church.

DRAINAGE AREA.--0.11 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to May 1983.

GAGE.--Water-stage recorder.

REMARKS.--Records fair.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.00	a.00	.01	a.00	a.10	.00	.00	.02	.01	.00	a.00	.00
2	a.00	a.00	.01	a.00	a.03	.00	.00	.01	.01	.00	a.00	.05
3	a.00	a.00	.00	a.00	a.01	.00	.01	.00	.01	.00	a.00	.00
4	a.00	a.00	.00	a.00	a.00	b.03	.03	.00	.02	.00	a.01	.00
5	a.00	a.00	.00	a.00	a.00	b.58	.02	b.45	.01	.00	a.30	.00
6	a.00	a.00	.00	a.00	a.00	.02	.01	b.28	.01	.00	a.06	.00
7	a.00	a.00	.00	a.00	a.00	.02	.00	.02	.01	.00	a.01	.00
8	a.00	a.00	.01	a.00	a.00	.01	.00	.00	.02	.00	.00	.00
9	a.00	a.00	.02	a.00	a.00	.01	.01	b.02	b.02	.00	.00	.00
10	a.00	a.00	.01	a.00	a.00	a.1.0	.00	b.08	b.1.7	b.38	.00	.00
11	a.00	a.00	.00	a.00	a.10	.00	b.13	b.19	.02	.00	.00	.00
12	a.00	a.00	.00	a.00	a.04	.00	b.12	.03	.01	.00	.00	.00
13	a.00	a.00	.00	a.00	a.01	.00	.03	.02	.01	.00	.00	.00
14	a.00	a.00	.00	a.00	a.00	.00	.02	b.1.5	.00	.00	.00	.00
15	a.00	a.00	.00	a.00	a.00	.00	.02	b.87	.00	.00	.05	.00
16	a.00	a.00	.00	a.00	a.50	.00	.01	.04	.00	.00	.00	.00
17	a.00	a.00	.00	a.00	a.13	.00	.01	b.02	.00	.00	.00	.00
18	a.00	a.00	.00	a.00	a.01	.00	.01	b.1.4	.00	.00	.00	.00
19	a.00	a.00	.00	a.00	a.00	.00	.02	b.08	.00	.00	.00	.00
20	a.00	a.00	.00	a.00	a.00	.00	.02	.02	.00	.00	.00	.00
21	a.00	a.00	.00	a.00	a.00	.00	.02	.02	a.00	.00	.00	.00
22	a.00	a.00	.00	a.00	a.10	.00	1.1	.01	a.00	.00	.00	.00
23	a.00	a.00	.00	a.00	a.08	.00	b.58	.01	a.00	.00	.00	.00
24	a.00	a.00	.00	a.00	a.01	.00	.03	b.19	a.00	.00	.00	.00
25	a.00	a.00	.00	a.00	a.00	.00	.02	b.06	a.00	.00	.00	.00
26	a.00	a.00	.00	a.00	a.00	.00	.01	b.04	.00	.00	.00	.00
27	a.00	a.00	.10	a.00	a.00	.00	.01	b.3.3	.00	a.37	.00	.00
28	a.00	a.00	.04	a.00	a.00	.01	.00	b.09	.00	a.02	.00	.00
29	a.00	a.00	.02	a.00	a.00	---	.00	.02	.00	a.00	.00	.00
30	a.00	a.00	.01	a.00	a.00	---	.02	.05	b.41	.00	a.00	.00
31	a.00	a.00	---	a.04	a.04	---	.01	---	.02	---	a.00	.00
TOTAL	.00	.17	.06	.04	2.13	.70	.40	10.86	.74	.39	.43	.05
MEAN	.00	.006	.002	.001	.076	.023	.080	.35	.025	.013	.014	.002
MAX	.00	.10	.02	.04	1.0	.58	1.1	3.3	.38	.37	.30	.05
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FIT	.00	.3	.1	.08	4.2	1.4	4.8	22	1.5	.8	.9	.10

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DAY	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES										SEP
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	
1	.00	.00	.01	a.04	a.13	a.11	.00	.00	b.05	.00	.00
2	.00	.00	.00	a.26	a.01	.06	b.00	.00	b.00	.00	a.20
3	.00	.00	.00	a.73	a.00	.02	b.24	.00	.00	.00	.00
4	.00	.00	.00	a.43	a.00	.24	b.00	.00	.00	.00	.00
5	.00	.00	.00	a.11	a.00	.05	b.07	.00	.00	.00	.00
6	.00	.00	.00	a.02	a.00	.02	.03	.00	b.00	.00	.00
7	.00	.00	.00	a.01	a.00	.02	b.00	.00	b.40	.00	.00
8	.00	.00	.00	a.00	a.00	.03	.00	.00	.00	.00	.00
9	.00	.00	.00	a.00	a.00	.04	.02	.00	.00	.00	.00
10	.00	.00	.00	a.00	a.00	.03	.00	.00	.00	.00	.00
11	.00	.00	.00	a.00	a.00	b.33	.00	.00	.00	.00	.00
12	.00	.00	.00	a.00	a.00	.02	b.00	.00	.00	.00	.00
13	.00	.00	.00	a.00	a.00	.22	b.00	.00	.00	.00	.00
14	.00	.00	.00	a.00	a.01	.01	.00	.00	.00	.00	.00
15	.00	.00	.00	a.00	a.02	.03	.00	.00	.00	.00	.00
16	.00	.00	.00	a.00	a.1.9	b.25	b.01	.00	b.10	.00	.00
17	.00	.00	.00	a.00	a.60	.00	b.32	.00	.00	.00	.00
18	.00	.00	.00	a.00	a.10	.00	.00	.00	b.00	.00	.00
19	.00	.00	.00	a.00	a.08	b.18	.00	.00	b.22	.00	.00
20	.00	.00	.00	a.00	a.01	b.08	.00	.00	.00	.00	.00
21	.00	.00	.00	a.06	a.00	.00	.00	.00	b.00	.00	.00
22	.00	.00	a.46	a.83	a.00	.00	.00	.00	b.05	.00	.00
23	.00	.00	a.22	a.33	a.00	.00	.00	.00	.00	.00	.00
24	.00	.00	a.08	a.03	a.00	.00	.00	.00	.00	.00	.00
25	.00	.00	a.03	a.00	a.00	.07	.00	.00	.00	.00	.00
26	.00	.00	b.23	a.00	a.00	.01	.00	.00	.00	.00	.00
27	.00	.00	a.62	a.00	a.00	.00	.00	.00	.00	.00	.00
28	.00	.00	a.12	a.00	a.00	.00	.00	b.00	.00	.00	.00
29	.00	.00	a.00	a.19	---	---	00	b.31	.00	.00	.00
30	.00	.00	a.00	a2.1	---	---	00	00	.00	.00	.00
31	.00	---	a.03	a.37	---	00	00	b.33	---	00	00
TOTAL	.00	.00	1.80	5.51	2.86	1.81	.69	.64	.55	.91	.00
MEAN	.000	.000	.058	.18	.10	.058	.023	.021	.018	.029	.087
MAX	.00	.00	.62	2.1	1.9	.33	.32	.33	.40	.64	2.4
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FRT	.00	.00	3.6	11	5.7	3.6	1.4	1.3	1.1	1.8	5.2

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	b.07 b.34	.00 .00	b.19 b.86	.00 .00	b.19 b.90	b.30 b.61	---	---	---	---
2	.00	.00	b.51	.00	.08	.00	b.15	b.11	---	---	---	---
3	.00	.00	b.89	.00	.04	.00	.01	.00	---	---	---	---
4	.00	.00	b.42	.00	.02	.00	.01	.00	---	---	---	---
5	.00	.00	.03	.00	.03	b.10	.05	.00	---	---	---	---
6	.00	.00	.00	.00	.02	.00	.07	.00	---	---	---	---
7	.00	.00	.00	.00	.00	.02	.02	.00	---	---	---	---
8	.00	.00	.00	.00	.00	.02	.00	.05	.00	---	---	---
9	.00	.00	.00	.00	.00	.02	.00	.05	.00	---	---	---
10	.00	.00	.00	.00	.03	.00	.02	.00	---	---	---	---
11	.00	.00	.00	.00	.04	.00	.00	.00	---	---	---	---
12	.00	.03	.02	.00	.01	.00	.00	b.06	---	---	---	---
13	.00	.00	.02	.00	.01	.00	b.92	.02	---	---	---	---
14	.00	.00	.00	.00	.01	.00	b1.3	.01	---	---	---	---
15	.00	.00	.02	.00	.01	.00	.04	.00	---	---	---	---
16	.00	.00	.03	.00	.01	.00	.00	.00	---	---	---	---
17	.00	.00	.01	.00	.01	.00	.00	.00	---	---	---	---
18	.00	.00	.00	.00	.00	.00	.02	.00	---	---	---	---
19	.00	.00	.00	.00	.00	.00	b.03	.00	---	---	---	---
20	.00	.00	.00	.00	.00	.00	b.81	.00	---	---	---	---
21	.00	.00	.00	.00	.00	.00	b.09	.00	---	---	---	---
22	.00	.00	b.46	.00	.00	.00	.01	.00	---	---	---	---
23	.00	.00	b.96	.04	.04	.00	.00	.00	---	---	---	---
24	.00	.03	b2.4	.03	.00	.00	.00	.00	---	---	---	---
25	.00	.00	b2.4	.02	.00	.00	.00	.00	---	---	---	---
26	.00	b.19	b.15	.01	.00	.00	b.00	.00	---	---	---	---
27	.00	b.03	b.60	.01	.00	b.86	.00	---	---	---	---	---
28	.00	b.51	b.34	.01	.04	b.14	.00	---	---	---	---	---
29	.00	.05	.01	.04	---	.01	.00	---	---	---	---	---
30	.00	.00	.00	.06	---	.00	.00	---	---	---	---	---
31	.00	---	.00	.00	---	.00	.00	---	---	---	---	---
TOTAL	.00	1.30	11.41	.22	1.41	2.09	3.71	---	---	---	---	---
MEAN	.000	.043	.37	.007	.050	.067	.12	---	---	---	---	---
MAX	.00	.51	5.1	.06	.86	.86	1.3	---	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
AC-FIT	.00	2.6	23	.4	2.8	4.1	7.4	---	---	---	---	---

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03342167. UNNAMED TRIBUTARY TO SULPHUR CREEK NEAR HYMERA, IN

LOCATION.--Lat $39^{\circ}09'55''$, long $87^{\circ}17'18''$, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 8 N., R. 8 W., Sullivan County, Hydrologic Unit 0150211, 1.6 miles southeast of Hymera and 2.0 miles north-northeast of Greenville.

DRAINAGE AREA.--0.21 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to June 1983.

GAGE.--Water-stage recorder and concrete V-notch weir.

REMARKS.--Records good, except for April 2, 1981 to May 14, 1981, which are fair.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.00	a.01	.07	.00	.17	.06	.02	a.10	.17	.00	.00	.08
2	a.00	a.01	.06	.00	.24	.05	a.00	a.10	.14	.00	.00	.08
3	a.00	a.01	.05	.00	a.21	.04	a.00	a.08	.12	.00	.00	.07
4	a.00	a.01	.04	.00	a.19	.07	a.00	a.07	.10	.00	.00	.07
5	a.00	a.01	.04	.00	a.16	b.71	a.00	a.06	.09	.01	.02	.06
6	a.00	a.01	.04	.00	a.15	b.47	a.00	a.06	.09	.02	.08	.05
7	a.00	a.01	.04	.00	a.12	.28	a.00	a.06	.09	.02	.07	.05
8	a.00	a.01	.04	.00	a.10	.20	a.00	a.06	.06	.02	.05	.04
9	a.00	a.01	.06	.00	a.09	.15	a.00	a.06	.05	.02	.04	.04
10	a.00	a.01	.06	.00	a.08	.12	a.02	a.09	b2.5	.01	.04	.03
11	a.00	a.01	.06	.00	b1.2	.10	a.04	a.13	b.98	.01	.06	.02
12	a.00	a.01	.06	.00	b.51	.08	a.66	a.22	b.50	.01	.05	.02
13	a.00	a.01	.05	.00	.28	.07	a.68	a.27	.31	.01	.04	.01
14	a.00	a.01	.04	.03	.21	.05	a.49	a.54	.21	.00	.04	.02
15	a.00	a.01	.04	.09	.20	.05	a.35	a.78	.14	.02	.05	.02
16	a.01	a.00	.04	.09	b.57	.04	a.26	a.41	.10	.02	.05	.03
17	a.01	a.01	.03	.09	b.54	.03	a.24	a.28	.08	.02	.04	.03
18	a.01	a.01	.03	.09	.34	.03	a.23	b1.6	.07	.02	.03	.03
19	a.01	a.01	.02	.09	.25	.02	a.20	b1.3	.08	.02	.02	.02
20	a.01	a.01	.00	.02	.09	.20	.02	a.16	b.66	.07	.04	.01
21	a.01	a.00	.02	.10	.15	.02	a.13	b.39	.06	.04	.01	.01
22	a.00	a.00	.02	.10	.14	.02	a.10	.25	.07	.03	.00	.00
23	a.01	a.00	a.00	.10	.14	.01	a.09	b.19	.05	.02	.00	.00
24	a.01	a.00	a.00	.10	.13	.01	a.08	b.36	.04	.02	.00	.00
25	a.02	a.00	a.00	.11	.11	.01	a.07	b.62	.04	.02	.00	.00
26	a.02	a.00	.00	a.00	.11	.09	.01	a.06	b.67	.03	.02	.00
27	a.02	a.08	a.00	.11	.08	.01	a.05	b6.6	.02	.01	.00	.00
28	a.02	a.10	a.00	.11	.07	.01	a.06	b1.5	.02	.01	.02	.00
29	a.01	a.09	a.00	.11	---	.02	a.08	b.68	.02	.01	.04	.00
30	a.01	a.08	a.00	.11	---	.03	a.09	b.40	.01	.00	.08	.00
31	a.01	---	a.00	.11	---	.02	---	---	.25	---	.00	.07
TOTAL	.19	.53	.93	1.74	6.72	2.81	4.16	18.84	6.31	.45	.91	.80
MEAN	.006	.018	.030	.056	.24	.091	.14	.61	.21	.015	.029	.027
MAX	.002	.010	.007	.11	1.2	.71	.12	.68	2.5	.04	.08	.08
MIN	.00	.00	.00	.00	.07	.01	.00	.00	.01	.00	.00	.00
AC-FT	.4	1.1	1.8	3.5	13	5.6	8.3	37	13	.9	1.8	1.6

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.19	b ¹ .22	b ¹ .4	.13	.13	.08	b ¹ .83	.03	.01	b ⁴ .0
2	.00	.01	.15	b ² .23	b ² .64	.12	.13	.07	b ² .45	.03	.01	b ² .3
3	.00	.01	.13	b ⁵ .57	.41	.11	.28	.06	.27	.06	.00	b ¹ .1
4	.00	.01	.11	b ⁸ .7	.31	.17	.22	.06	.19	.06	.00	b ⁷ .3
5	.00	.02	.10	b ⁴ .9	.23	.18	.20	.06	.15	.05	.00	b ⁴ .5
6	.00	.02	.08	.34	.19	.16	.20	.05	.11	.04	.00	.32
7	.00	.02	.07	.27	.15	.14	.16	.14	.16	.04	.00	.25
8	.00	.01	.06	.19	.13	.12	.16	.18	.22	.06	.00	.23
9	.00	.02	.05	.15	.15	.11	.19	.16	.19	.08	.00	.19
10	.00	.01	.04	.11	.13	.11	.18	.12	.14	.07	.00	.16
11	.00	.01	.04	.08	.11	.15	.16	.10	.10	.08	.01	.13
12	.00	.01	.03	.07	.10	.17	.15	.09	.09	.06	.01	.11
13	.00	.01	.03	.07	.09	.31	.13	.07	.07	.05	.01	.12
14	.00	.00	.00	.03	.06	.08	.30	.11	.06	.04	.00	.11
15	.00	.00	.00	.03	.06	.10	b ⁴ .46	.11	.05	.06	.00	.10
16	.00	.01	.02	.05	b ² .3	b ⁹ .8	.20	.04	.09	.03	.00	.09
17	.00	.02	.04	.04	b ⁴ .1	b ⁶ .69	b ⁵ .58	.04	.10	.03	.00	.07
18	.01	.02	.04	.04	b ¹ .8	b ⁶ .68	b ⁴ .42	.04	.08	.02	.00	.09
19	.00	.03	.04	.04	b ⁹ .7	b ² .9	.31	.06	.07	.04	.00	.07
20	.00	.05	.04	.04	b ⁷ .9	b ¹ .6	.27	.05	.06	.04	.00	.06
21	.00	.05	b ⁰ .04	b ⁶ .1	b ⁷ .2	.22	.07	.04	.04	.00	.00	.05
22	.00	.04	b ⁵ .7	b ⁶ .66	b ⁴ .44	.17	.14	.04	.05	.00	.00	.04
23	.00	.04	b ² .3	b ³ .1	.33	.32	.15	.12	.03	.06	.00	.03
24	.00	.05	b ⁸ .6	b ⁸ .5	.28	.26	.13	.09	.03	.05	.00	.03
25	.00	.05	b ⁴ .6	b ⁴ .5	.23	.27	.11	.07	.02	.04	.00	.03
26	.00	.07	b ³ .4	.28	.18	.26	.11	b ¹ .08	.02	.04	.00	.03
27	.01	.11	b ¹ .1	.20	.16	.21	.10	b ⁶ .1	.02	.04	.00	.03
28	.01	.09	b ⁶ .65	.15	.14	.18	.09	b ⁵ .56	.03	.00	.00	.03
29	.01	.08	b ³ .39	.13	---	.15	.08	b ¹ .7	.03	.00	.00	.02
30	.01	.09	.25	b ³ .1	---	.15	.08	b ¹ .6	.04	.02	.00	.02
31	.01	---	.22	b ⁵ .1	---	.15	---	b ⁸ .7	---	.02	.00	---
TOTAL	.06	.97	8.51	18.05	16.55	12.70	5.53	7.49	3.79	1.37	.05	10.99
MEAN	.002	.032	.27	.58	.59	.41	.18	.24	.13	.044	.002	.37
MAX	.01	.11	2.3	5.1	4.1	2.9	.58	1.7	.83	.08	.01	4.0
MIN	.00	.00	.02	.04	.08	.11	.08	.04	.02	.02	.00	.02
AC-FIT	.1	1.9	17	36	33	25	11	15	7.5	2.7	.10	2.2

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.04	.31	.25	.25	.05	b .22	b3 .0	.12	---	---	---
2	.02	.05	b .28	b1 .2	.05	b .96	b3 .4	.10	---	---	---	---
3	.02	.06	b7 .3	b .86	.05	b .96	b1 .8	.14	---	---	---	---
4	.02	.05	b4 .5	.15	.05	b .56	b .85	.20	---	---	---	---
5	.02	.04	b2 .0	.13	.31	.07	b .45	b .48	.18	---	---	---
6	b .02	.04	b .88	.13	.24	b .54	b .61	.31	.20	---	---	---
7	b .42	.03	b .50	.11	.21	b .43	b .58	.23	.16	---	---	---
8	b .42	.03	.32	.10	.17	.30	.41	.18	.14	---	---	---
9	b2 .7	.02	.23	.10	.16	.22	.43	.14	.12	---	---	---
10	b1 .4	.02	.19	.10	.14	.16	.40	.11	.10	---	---	---
11	b .64	.04	.17	.10	.14	.13	.31	.10	.09	---	---	---
12	b .38	.08	.14	.09	.12	.11	.24	.10	.08	---	---	---
13	.26	.08	.12	.09	.11	.10	b .68	b .14	.07	---	---	---
14	.19	.07	.11	.09	.10	.09	b2 .5	b .49	.07	---	---	---
15	.15	.06	.12	.08	.10	.08	b .88	b .59	---	---	---	---
16	.12	.05	.15	.07	.09	.07	b .46	.37	---	---	---	---
17	.10	.05	.14	.07	.09	.07	.30	.25	---	---	---	---
18	.08	.04	.13	.06	.09	.10	.21	.21	---	---	---	---
19	.07	a .04	.11	.06	.09	b .12	.17	.21	---	---	---	---
20	.08	a .06	.11	.06	.08	b .52	.14	.18	---	---	---	---
21	.07	a .09	.09	.07	.08	b .99	.12	.16	---	---	---	---
22	.06	a .12	.09	.13	.07	b .54	.11	.19	---	---	---	---
23	.05	a .17	.10	.18	.07	.34	.10	.17	---	---	---	---
24	.04	.21	b1 .8	.20	.06	.24	.08	.15	---	---	---	---
25	.04	.17	b6 .0	.20	.06	.19	.07	.13	---	---	---	---
26	.04	.25	b1 .7	.18	.05	.16	.07	.11	---	---	---	---
27	.03	b .33	b1 .8	.15	.05	.32	.06	.10	---	---	---	---
28	.03	b .96	b1 .9	.14	.05	.43	.07	.18	---	---	---	---
29	.03	b .71	b .82	.15	---	.30	.07	.21	---	---	---	---
30	.03	b .44	b .48	.24	---	.22	.17	.17	---	---	---	---
31	.03	---	.32	.21	---	.18	---	.14	---	---	---	---
TOTAL	7.58	4.40	32.91	4.06	5.51	7.22	12.39	14.85	---	---	---	---
MEAN	.24	.15	1.06	.13	.20	.23	.41	.48	---	---	---	---
MAX	2.7	.96	7.3	.25	1.2	.99	2.5	3.4	---	---	---	---
MIN	.02	.02	.09	.06	.05	.05	.06	.10	---	---	---	---
AC-FT	15	8.7	6.5	8.1	11	14	25	29	---	---	---	---

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03360125. POND CREEK NEAR COAL CITY, IN

LOCATION.--Lat $39^{\circ}1'2''$, long $87^{\circ}0'3''$; in NE $\frac{1}{4}$ sec. 22, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, on left bank at upstream side of bridge on County Road 108 East, 1.0 mile southeast of Coal City, and 3.0 miles upstream from mouth.

DRAINAGE AREA.--1.97 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to May 1983.

GAGE.--Water-stage recorder.

REMARKS.--Records good.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.1	a1.0	a.49	a1.0	1.3	1.2	1.7	4.4	1.3	a.66	1.1
2	.87	1.1	a.90	a.49	a2.0	1.2	1.1	1.4	4.1	1.2	a.65	1.1
3	.82	1.1	a.72	a.48	a1.2	1.1	1.3	1.2	3.6	1.2	a.68	.81
4	.79	1.0	a.72	a.47	a.74	1.9	1.3	1.2	3.5	1.2	a.66	.69
5	.77	1.0	a.90	a.46	a.56	b13	1.3	1.5	3.3	1.4	a1.4	.58
6	.72	1.0	a.90	a.46	a.56	4.4	1.0	2.5	3.3	1.2	1.4	.52
7	.79	1.1	a.90	a.46	a.56	2.5	.86	1.8	3.1	1.1	.94	.54
8	.77	1.0	a1.1	a.46	a.66	2.0	.86	1.4	2.8	1.1	.84	.55
9	.70	1.0	a1.4	a.46	1.3	1.7	1.0	1.4	2.7	1.1	.77	.49
10	.68	1.0	a1.2	a.46	14	1.5	4.7	b37	8.8	.98	.77	.48
11	.71	.71	.96	a1.0	a.46	8.5	1.2	b7.6	b22	3.9	.89	.77
12	a.73	.92	a.81	a.46	a1.9	1.2	6.0	8.2	3.1	.87	.71	.54
13	a.71	1.0	a.64	a.46	a1.3	1.1	3.3	5.4	2.9	.85	.71	.54
14	a.75	1.0	a.58	a.46	a1.1	1.1	2.3	b17	2.7	.81	.72	.66
15	a.81	1.0	a.72	a.46	1.3	1.0	1.7	b22	2.5	1.0	1.6	.67
16	a.87	1.0	a.64	a.54	10	.96	1.4	7.2	2.3	.87	1.1	.95
17	2.3	1.3	a.58	a.48	6.1	.95	1.3	b24	2.1	.96	.86	.70
18	1.4	1.2	a.58	a.43	4.1	.91	1.2	b11	2.0	1.1	.76	.60
19	1.0	.81	a.54	a.43	3.8	.90	1.4	6.3	2.0	1.2	.71	.53
20	.99	.78	a.52	a.44	4.2	.90	1.8		2.0	1.5	.69	.49
21	.92	.80	a.50	a.50	2.7	a.81	1.3	4.6	3.8	1.1	.62	.40
22	.87	.72	a.48	a.55	2.4	a.75	3.3	b9.2	3.8	2.2	1.0	.62
23	.63	.89	a.48	a.55	2.6	a.72	a.72	b3.1	1.7	1.0	.62	.31
24	1.3	.91	a.48	a.55	2.6	a.72	3.4	b11	1.7	1.0	.59	.29
25	1.4	.81	a.48	a.60	2.1	a.72	2.3	b13	1.6	.99	.56	.30
26	.83	.81	a.48	a.60	1.8	a.64	1.9	b13	1.5	a.90	.58	.32
27	.93	a4.8	a.53	a.56	1.6	a1.2	1.6	b77	1.5	a.79	.93	.34
28	1.5	a2.4	a.51	a.54	1.5	a.90	1.5	14	1.5	a.85	.88	.31
29	.88	a1.5	a.49	a.52	---	1.7	2.3	7.1	1.4	a.72	1.1	.50
30	.75	a1.2	a.49	a.50	---	2.4	2.0	5.7	1.3	a.72	.84	.49
31	1.2	---	a.72	a.70	---	1.4	---	4.8	---	a.64	.70	---
TOTAL	29.21	35.21	21.99	15.48	82.18	52.78	71.42	336.3	83.3	31.54	25.44	16.65
MEAN	.94	1.17	.71	.50	2.94	1.70	2.38	10.8	2.78	1.02	.82	.56
MAX	2.3	4.8	1.4	.70	14	1.3	9.2	77	8.8	1.5	1.6	1.1
MIN	.63	.72	.48	.43	.56	.64	.86	1.2	1.3	.64	.56	.29
AC-FT	58	70	44	31	163	105	142	667	165	63	50	33

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.51	1.3	1.4	7.7	2.2	2.2	1.8	b _{7.0}	1.1	1.4	a ₅₀
2	.34	.51	.69	2.3	3.5	2.2	2.3	1.7	2.5	1.1	1.4	a ₁₀
3	.34	.50	.49	b _{8.0}	a _{2.8}	2.1	8.9	1.6	1.8	b _{7.0}	1.2	a _{2.5}
4	.34	.51	.50	b ₁₁	a _{2.4}	3.4	3.6	1.5	1.7	2.9	1.2	a _{1.6}
5	.39	.51	.38	3.6	a _{2.1}	2.7	3.2	1.4	1.5	1.6	2.6	a _{1.6}
6	1.0	.47	.34	2.2	a _{1.9}	2.4	3.0	1.4	1.7	b _{4.7}	1.6	a _{1.5}
7	.50	.40	.34	1.8	a _{1.7}	2.2	2.4	5.1	1.7	2.4	1.3	a _{1.1}
8	.40	.43	.30	a _{1.5}	a _{1.5}	2.0	2.6	3.0	1.6	a b ₅₆	1.2	a _{1.1}
9	.34	.50	.27	a _{1.3}	a _{1.4}	1.8	3.0	1.9	1.3	b ₁₄	1.1	a _{1.0}
10	.31	.46	a _{2.2}	a _{1.1}	a _{1.3}	1.9	2.7	1.5	1.8	8.1	1.1	a _{.75}
11	.29	.45	a _{.20}	a _{1.0}	a _{1.2}	3.9	2.6	1.3	2.2	6.5	1.2	a _{.75}
12	.29	.45	a _{.19}	a _{.85}	a _{1.1}	3.3	2.4	1.2	1.5	3.5	a _{1.0}	a _{.66}
13	.29	.45	a _{.18}	a _{.75}	a _{1.0}	b ₁₁	2.2	1.1	1.2	2.8	a _{1.0}	a _{.75}
14	.29	.45	a _{.17}	a _{.67}	a _{1.0}	5.5	2.1	1.1	.90	2.6	a _{1.1}	a _{.75}
15	.31	.40	a _{.16}	a _{.60}	a _{1.5}	9.4	2.1	2.7	.87	2.4	a _{1.0}	a _{.80}
16	.29	.52	a _{.22}	a _{.54}	b ₂₁	b ₁₉	b _{9.8}	2.2	1.5	2.3	a _{1.0}	a _{.80}
17	1.0	.52	a _{.15}	a _{.50}	b ₃₉	7.3	b ₁₈	1.1	1.1	2.0	a _{1.0}	a _{.71}
18	1.0	.41	a _{.15}	a _{.45}	b ₁₄	4.3	5.4	.95	.92	1.8	a _{1.0}	a _{.86}
19	.48	.64	a _{.15}	a _{.41}	8.2	b ₁₅	3.6	1.1	.86	1.9	a _{1.0}	a _{.86}
20	.45	.69	a _{.15}	a _{.38}	7.5	8.9	3.4	1.0	.80	1.7	a _{.93}	a _{.71}
21	.40	.44	a _{5.7}	a _{.55}	6.0	4.9	2.7	1.3	.75	1.7	a _{.93}	a _{1.0}
22	.54	.34	a ₁₂	b _{7.1}	3.9	3.6	2.5	1.1	.75	1.6	a _{.93}	a _{1.0}
23	.73	.39	a _{7.6}	b ₁₉	3.5	3.2	2.3	.96	.73	1.5	a _{1.0}	a _{1.0}
24	.51	.52	a _{2.6}	a _{3.1}	3.2	3.0	2.2	.91	.71	1.1	a _{1.1}	a _{1.1}
25	.51	.37	a _{2.2}	a _{1.9}	2.7	3.6	2.2	.86	.71	1.5	a _{1.1}	a _{1.0}
26	.63	.83	a _{1.6}	a _{1.5}	2.5	3.1	2.1	1.7	.70	1.4	a _{1.1}	a _{.86}
27	.93	.97	a _{5.8}	a _{1.3}	2.4	2.6	1.9	3.0	.66	1.2	a _{1.1}	a _{.80}
28	.63	.52	a _{3.0}	a _{1.2}	2.3	2.4	1.9	b ₁₇	1.2	a _{1.1}	a _{.71}	a _{.66}
29	.58	.38	a _{1.6}	a _{1.1}	---	2.3	1.8	b ₂₂	2.9	1.2	a _{1.1}	a _{.71}
30	.51	.88	a _{1.4}	b ₂₈	---	2.4	1.8	b ₁₂	1.6	1.1	a _{3.0}	a _{.71}
31	.51	---	b ₃₅	---	1.3	2.6	---	b _{8.2}	---	a _{1.2}	a _{1.9}	---
TOTAL	15.51	15.42	51.35	140.10	148.3	144.2	106.9	88.18	60.96	141.5	38.69	87.64
MEAN	.50	.51	1.66	4.52	5.30	4.65	3.56	2.84	2.03	4.56	1.25	2.92
MAX	1.0	.97	1.2	35	39	19	18	22	17	56	3.0	50
MIN	.29	.34	.15	.38	1.0	1.8	1.8	.86	.66	1.1	.93	.66
AC-FT	31	31	102	278	294	286	212	175	121	281	77	174

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a .71	.66	1.8	3.2	4.5	1.3	b ₁₃	2.8	b ₃₅	---	---	---
2	a .71	.90	b ₆ 7	3.1	b ₂₈	1.3	b ₁₃	2.8	b ₃₀	---	---	---
3	a .71	1.0	b ₂ 7	2.8	7.2	1.3	b ₁₆	9.1	---	---	---	---
4	a .71	.82	b ₁₅	2.7	3.4	1.3	3.7	6.5	---	---	---	---
5	a .71	.73		2.5	2.8	1.4	4.1	4.0	---	---	---	---
6	a .80	.68	5.5	2.5	2.5	3.5	5.1	3.5	---	---	---	---
7	a ₁ .7	.66	3.3	2.4	2.3	2.2	5.4	5.2	---	---	---	---
8	a ₁ .1	.66	2.8	2.3	2.1	1.9	3.7	4.6	---	---	---	---
9	a ₃ .8	.66	2.5	2.3	2.1	1.6	3.2	3.6	---	---	---	---
10	a ₁ .3	.66	2.5	2.3	2.1	1.6	2.9	3.4	---	---	---	---
11	a ₁ .1	.68	2.8	2.2	2.0	1.5	2.6	3.3	---	---	---	---
12	.98	1.5	2.6	2.1	1.8	1.4	2.4	3.8	---	---	---	---
13	.88	.99	2.4	2.1	1.8	1.4	b ₁₆	4.1	---	---	---	---
14	.80	.84	2.2	2.0	1.7	1.4	b ₂₆	b ₁₁	---	---	---	---
15	.79	.77	2.6	1.9	1.6	1.5	5.6	5.5	---	---	---	---
16	.83	.72	2.4	1.8	1.6	1.4	3.3	4.4	---	---	---	---
17	1.1	.71	2.3	1.7	1.6	1.4	4.2	---	---	---	---	---
18	.99	.68	2.3	1.6	1.6	1.9	2.9	---	---	---	---	---
19	.88	.70	2.2	1.6	1.7	2.0	2.5	---	---	---	---	---
20	.90	.72	2.0	1.5	1.9	b ₉ .8	2.4	---	---	---	---	---
21	.88	1.5	1.9	1.7	1.7	b ₈ .4	2.3	---	---	---	---	---
22	.82	1.6	1.9	2.2	1.5	3.1	2.3	---	---	---	---	---
23	.76	4.3	1.9	2.1	1.4	2.4	2.3	---	---	---	---	---
24	.71	2.0	b ₁₆	2.0	1.4	2.1	2.3	---	---	---	---	---
25	.71	1.2	b ₆ 4	1.8	1.3	1.9	2.2	---	---	---	---	---
26	.70	2.0	b ₁₂	1.7	1.4	1.8	2.2	---	---	---	---	---
27	.70	1.8	b ₁₇	1.6	1.3	2.9	2.1	---	---	---	---	---
28	.69	b ₁₀	b ₁₈	1.5	1.4	3.1	2.2	---	---	---	---	---
29	.70	2.7	6.9	1.7	---	2.4	b ₂ 1	---	---	---	---	---
30	.71	1.8	4.4	2.3	---	2.1	b ₇ .9	---	---	---	---	---
31	.66	---	3.5	1.9	---	2.0	---	---	---	---	---	---
TOTAL	29.54	44.64	300.9	65.1	85.7	73.3	148.8	---	---	---	---	---
MEAN	.95	1.49	9.71	2.10	3.06	2.36	4.96	---	---	---	---	---
MAX	3.8	10	67	3.2	28	9.8	26	---	---	---	---	---
MIN	.66	.66	1.8	1.5	1.3	1.3	2.1	---	---	---	---	---
AC-FT	59	89	597	129	170	145	295	---	---	---	---	---

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

03342219. UNNAMED TRIBUTARY TO BIG BRANCH NEAR HYMERA, IN

LOCATION.--Lat $39^{\circ}07'51''$, long $87^{\circ}16'41''$, in SE^{1/4} sec. 15, T. 8 N., R. 8 W., Sullivan County, Hydrologic Unit 0150211, 50.0 ft upstream from County Road 700 East, 4.1 miles southeast of Hymera and 0.8 mile upstream from mouth.

DRAINAGE AREA.--0.32 mi².

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to June 1983.

GAGE.--Water-stage recorder and concrete V-notch weir.

REMARKS.--Records good.

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.13	.19	.17	.18	.30	.32	a.34	b1.5	.30	.16	b.51
2	.09	.13	.19	.17	.23	.28	.26	a.30	b1.3	.28	.14	b.75
3	.08	.13	.17	.17	.23	.27	.24	a.27	b1.2	.27	.12	b.61
4	.07	.12	.17	.16	.21	.32	.25	a.24	b1.1	.29	.13	b.46
5	.07	.12	.17	.16	.20	b.74	.30	a.30	b.99	b.47	.22	.35
6	.06	.12	.16	.16	.20	b.79	.27	a.64	b.98	b.58	b.70	.27
7	.06	.11	.16	.17	.20	b.77	.25	a.50	b.91	b.51	b.53	.22
8	.06	.11	.17	.17	.20	b.63	.23	a.05	b.77	.42	.39	.20
9	.06	.11	.22	.17	.20	b.48	.23	.23	b.70	.39	.29	.17
10	.06	.11	.22	.17	b.50	.41	.30	b1.1	b3.5	.53	.24	.14
11	.06	.11	.21	.16	b1.2	.37	.35	b2.1	b2.6	b.43	.25	.10
12	.06	.10	.20	.16	b.62	.35	b.71	b1.5	b1.5	.35	.23	.09
13	.06	.10	.19	.16	.39	.33	b.74	b1.1	b1.2	.34	.19	.09
14	.06	.10	.19	.16	.31	.32	b.53	b1.4	b.98	.32	.17	.09
15	.06	.10	.19	.17	.28	.30	.37	b2.4	b.87	.32	.25	.11
16	.06	.11	.19	.16	b.49	.29	.29	b1.8	b.83	.32	.32	.16
17	.11	.12	.18	.16	b.67	.28	.28	b1.3	b.77	.32	.24	.18
18	.14	.13	.17	.15	b.57	.27	.27	b1.9	b.62	.28	.19	.17
19	.14	.13	.17	.15	b.49	.26	.26	b2.2	b.58	.26	.16	.15
20	.14	.12	.16	.16	.48	.25	.36	b1.6	b.57	.40	.13	.12
21	.13	.12	.15	.17	.48	.25	.30	b1.3	b.59	.46	.10	.11
22	.12	.12	.15	.18	b.52	.24	b.32	b1.1	b.60	.36	.09	.10
23	.11	.12	.15	.18	b.56	.24	b1.3	b.96	b.55	.27	.08	.07
24	.15	.13	.16	.18	b.54	.25	a1.0	b1.2	b.52	.25	.07	.05
25	.19	.13	.16	.18	b.46	.24	a.82	b1.6	b.47	.23	.07	.04
26	.17	.12	.16	.18	.42	.24	a.60	b1.6	.46	.21	.07	.05
27	.17	.22	.16	.17	.35	.26	a.48	b6.1	.42	.21	b.15	.10
28	.19	.24	.16	.16	.33	.26	a.37	b4.2	.37	.22	b.33	.10
29	.17	.22	.16	.16	---	.27	a.50	b2.9	.36	.21	b.58	.12
30	.16	.19	.16	.15	---	.38	a.40	b2.2	.32	.21	b.58	.18
31	.15	---	.17	.15	---	.43	---	b1.8	---	.18	b.49	---
TOTAL	3.30	3.92	5.41	5.12	11.51	11.07	12.90	46.23	28.13	10.19	7.66	5.86
MEAN	.11	.13	.17	.17	.41	.36	.43	1.49	.94	.33	.25	.20
MAX	.19	.24	.22	.18	1.2	.79	1.3	6.1	3.5	.58	.70	.75
MIN	.06	.10	.15	.15	.18	.24	.23	.05	.32	.18	.07	.04
AC-FTR	6.5	7.8	11	10	23	22	26	92	56	20	15	12

Table 2.—Streamflow at selected sites, coal-mining region, west-central Indiana—Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.19	.42	b.57	a3.0	b.72	b.74	.43	b1.7	.39	.08	b2.5
2	.21	.21	.38	b.55	a2.0	b.70	b.68	.42	b1.3	.33	.06	b2.8
3	.20	.21	.35	b.81	a1.3	b.69	b.88	.42	b1.0	b.50	.05	b1.6
4	.20	.19	.33	b1.1	a1.1	b.80	b.74	.41	b.88	b.46	.05	b.93
5	.20	.20	.29	b.98	a1.0	b.80	b.71	.39	b.79	.33	.05	b.60
6	b.51	.21	.26	b.86	a.90	b.70	b.77	.37	b.68	.27	.07	.44
7	b.67	.19	.24	b.77	a.78	b.63	b.67	b.71	b.72	.28	.07	.36
8	b.65	.17	.22	b.62	a.70	b.56	b.66	b.88	b.91	.39	.07	.31
9	b.59	.19	.21	b.55	a.80	b.52	b.72	b.71	b.84	.41	.07	.27
10	b.54	.18	.19	b.47	a.70	b.52	b.66	b.59	b.73	.40	.06	.24
11	b.50	.17	.18	a.40	a.60	b.60	b.63	b.51	b.65	.43	.12	.21
12	.47	.16	.17	a.36	a.54	b.65	b.58	.44	b.60	.32	.13	.19
13	.46	.15	.17	a.32	a.48	b.86	b.53	.39	b.56	.26	.11	.21
14	.45	.14	.16	a.28	a.43	b.85	b.52	.35	b.52	.25	.09	.23
15	.45	.14	.16	a.25	a1.1	b.94	b.51	.31	b.47	.21	.08	.24
16	.47	.17	.16	a.23	a2.1	b1.2	b.76	.29	b.64	.19	.07	.22
17	b.58	.20	a.17	a.21	a5.4	b1.3	b1.3	.27	b.64	.17	.06	.18
18	b.72	.21	a.19	a.19	a4.4	b1.1	b1.1	.30	b.57	.16	.05	.22
19	b.56	.26	a.18	a.18	b3.1	b1.7	b.90	b.49	b.50	.26	.04	.20
20	b.50	.34	.20	a.17	b1.7	b2.0	b.89	b.50	b.47	.32	.03	.17
21	.40	.30	.25	b.30	b1.5	b1.8	b.78	b.73	.44	.27	.03	.14
22	.24	.26	b.54	b.57	b1.4	b1.4	b.66	b.88	.42	.23	.02	.11
23	.25	.25	b1.9	b2.2	b1.2	b1.2	b.59	b.79	.38	.25	.02	.11
24	.22	.27	b1.4	b1.7	b1.1	b1.1	b.55	b.60	.32	.22	.02	.13
25	.19	.25	b.97	b1.1	b.97	b1.2	b.54	b.47	.28	.19	.02	.15
26	.22	.27	b.77	b.97	b.87	b1.1	b.54	b.51	.27	.17	.02	.15
27	.27	.42	b.98	b.78	b.82	b.94	b.51	b1.1	.27	.17	.03	.15
28	.26	.39	b.90	b.63	b.77	b.80	.46	b1.3	.37	.16	.04	.16
29	.25	.33	b.74	b.58	---	b.73	.41	b1.6	.45	.15	.03	.19
30	.21	.33	b.61	b2.0	---	b.68	.42	b2.3	.48	.12	.08	.20
31	.20	---	b.56	b5.5	---	b.76	---	b1.9	---	.09	.19	---
TOTAL	11.85	6.95	14.25	26.20	40.76	29.55	20.41	21.36	18.85	8.35	1.91	13.61
MEAN	.38	.23	.46	.85	1.46	.95	.68	.69	.63	.27	.062	.45
MAX	.72	.42	1.9	5.5	5.4	2.0	1.3	2.3	1.7	.50	.19	2.8
MIN	.19	.14	.16	.17	.43	.52	.41	.27	.27	.09	.02	.11
AC-FIT	24	14	28	52	81	40	.59	.42	.37	17	3.8	27

Table 2.--Streamflow at selected sites, coal-mining region, west-central Indiana--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.09	b.56	b.1.4	b.56	.27	b.72	b2.8	b.71	---	---	---
2	.12	.13	b.52	b1.2	b1.1	.29	b1.1	b4.2	b.63	---	---	---
3	.11	.23	b3.1	b1.1	b1.3	.29	b1.4	b3.5	b1.0	---	---	---
4	.10	.23	b6.1	b.96	b1.0	.30	b1.3	b2.6	b1.3	---	---	---
5	.10	.19	b3.9	b.89	b.83	.33	b1.2	b2.0	b1.1	---	---	---
6	b.10	.16	b2.6	b.84	b.78	b.99	b1.3	b1.6	b1.2	---	---	---
7	b.41	.14	b1.9	b.79	b.74	b1.1	b1.2	b1.5	b1.0	---	---	---
8	b.64	.13	b1.4	b.73	b.66	b.86	b1.2	b1.6	b.86	---	---	---
9	b1.5	.12	b1.1	b.67	b.62	b.68	b1.2	b1.4	b.72	---	---	---
10	b1.7	.13	b1.0	b.65	b.61	b.59	b1.2	b1.2	b.61	---	---	---
11	b1.1	.15	b.95	b.63	b.58	b.51	b1.1	b1.0	b.54	---	---	---
12	b.70	.27	b.82	b.61	b.54	.45	b.99	b1.1	b.48	---	---	---
13	b.50	.41	b.62	b.57	b.50	.41	b1.2	b1.3	a.44	---	---	---
14	.38	.37	b.61	b.54	.47	.40	b2.5	b1.5	a.40	---	---	---
15	.31	.29	b.75	.51	.47	.38	b2.2	b1.6	---	---	---	---
16	.25	.22	b.65	.47	.47	.36	b1.7	b1.4	---	---	---	---
17	.21	.19	b.57	.46	.45	.35	b1.5	b1.1	---	---	---	---
18	.17	.18	b.54	.44	.45	.43	b1.3	b1.1	---	---	---	---
19	.14	.16	a b.52	.41	.45	.48	b1.1	b1.1	---	---	---	---
20	.17	.17	a b.48	.39	.44	.65	b1.0	b1.1	---	---	---	---
21	.17	.19	.46	b.45	.41	b1.1	b.95	b1.0	---	---	---	---
22	.16	.20	.45	b.59	.40	b.92	b.88	b1.1	---	---	---	---
23	.15	.29	.46	b.64	.37	b.77	b.84	b1.1	---	---	---	---
24	.14	.42	b1.2	b.63	.35	b.65	b.76	b1.0	---	---	---	---
25	.12	.35	b4.3	b.58	.33	b.58	b.67	b.95	---	---	---	---
26	.11	.36	b3.7	b.52	.30	b.53	b.60	b.85	---	---	---	---
27	.10	b.42	b2.9	.48	.28	b.75	b.55	b.76	---	---	---	---
28	.09	b.74	b3.1	b.45	.28	b.88	b.55	b1.0	---	---	---	---
29	.08	b.84	b2.4	b.47	---	b.78	b.61	b1.2	---	---	---	---
30	.08	b.68	b1.9	b.59	---	b.69	b.79	b.99	---	---	---	---
31	.08	---	b1.6	b.55	---	b.66	---	b.83	---	---	---	---
TOTAL	10.13	8.45	51.16	20.21	15.74	18.43	33.61	45.48	---	---	---	---
MEAN	.33	.28	1.65	.65	.56	.59	1.12	1.47	---	---	---	---
MAX	1.7	.84	6.1	1.4	1.3	1.1	2.5	4.2	---	---	---	---
MIN	.08	.09	.45	.39	.28	.27	.55	.76	---	---	---	---
AC-FT	20	17	101	40	31	37	67	90	---	---	---	---

^a Estimated.^b Unit values stored.

Table 3.--Chemical analyses of surface water sampled periodically at selected sites, coal-mining region, west-central Indiana

[Measurements by U.S. Geological Survey; specific conductance, in micromho per centimeter at 25° Celsius; CaCO₃, calcium carbonate; mg/L, milligram per liter; H, hydrogen; µg/L, microgram per liter; AC-FT, acre foot.
Chemical constituents are dissolved unless stated otherwise.]

03342110 HOOKER CREEK NEAR LEWIS, IN

LOCATION.--Lat 39°14'39", long 87°16'40", in NW₁/NW₄ sec. 11, T. 9 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 1100 North, 1.0 mile east of County Road 600 East, 1.4 miles southwest of Lewis, and 4.4 miles north of Hymera.

Date of Sampling	Time ¹	Specific Conductance	pH	Alkalinity as CaCO ₃ (mg/L)	Acidity as CaCO ₃ (mg/L)	Acidity as H (mg/L)	Hardness Noncarbonate as CaCO ₃ (mg/L)	Hardness as CaCO ₃ (mg/L)	Sodium (mg/L)	Potassium (mg/L)
11-5-81	1445	403	7.6	170	4.9	0.1	26	196	5.7	7.9
12-8-81	1230	547	8.0	210	--	--	49	259	13	6.0
12-29-81	1400	452	8.6	120	9.9	.2	69	189	13	2.8
2-24-82	1030	328	7.5	100	19	.4	45	145	8.8	4.4
3-12-82	1230	397	7.6	110	10	--	68	178	14	4.5
4-9-82	1050	451	7.2	160	--	--	42	202	14	1.9
5-6-82	1000	547	8.0	230	14	0.3	38	268	15	2.3
5-31-82	2145	150	7.1	44	9.9	.2	13	56	3.6	3.9
5-31-82	2355	185	7.4	52	10	--	26	78	4.5	3.9
6-3-82	1215	518	8.0	196	14	.3	34	230	10	3.2
7-1-82	1030	520	8.0	214	4.9	.1	32	246	14	3.2
7-8-82	1115	85	7.1	28	4.9	.1	6.0	34	4.5	3.2
7-8-82	1235	104	7.2	34	4.9	.1	8.0	41	3.7	3.3
7-8-82	1340	151	7.3	52	10	--	10	61	3.4	3.6
10-15-82	0900	489	7.7	196	9.9	.2	28	224	7.1	7.3

Table 3.--Chemical analyses of surface water sampled periodically at selected sites,
coal-mining region, west-central Indiana--Continued

Date of sampling	Calcium (mg/L)	Magnesium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Silica (mg/L)	Aluminum (μg/L)	Aluminum sus- pended recov- erable (μg/L)	Aluminum total recov- erable (μg/L)	Iron (μg/L)
11-5-81	57	13	14	.2	30	12	10	70	80	180
12-8-81	74	18	21	.2	60	6.8	30	90	120	45
12-29-81	51	15	23	.1	59	9.3	20	320	340	110
2-24-82	40	11	14	.1	36	7.9	<10	--	490	56
3-12-82	48	14	20	.2	52	--	30	1900	1900	29
4-9-82	53	17	13	.1	68	6.0	30	180	210	66
5-6-82	71	22	9.8	0.2	55	4.4	<10	--	60	52
5-31-82	17	3.5	7.0	.2	17	5.9	10	10000	10000	140
5-31-82	23	5.0	6.6	.2	18	7.5	60	910	970	170
6-3-82	64	17	12	.2	43	10	10	210	220	10*
7-1-82	67	19	13	.2	35	6.4	20	160	180	21
7-8-82	10	2.3	6.9	<.1	13	3.9	330	2000	2300	300
7-8-82	12	2.8	3.7	<.1	10	4.9	170	1400	1600	220
7-8-82	18	4.1	4.8	<.1	13	5.9	70	1100	1200	120
10-15-82	65	15	10	0.2	25	10	50	10	60	180

Table 3.--Chemical analyses of surface water sampled periodically at selected sites, coal-mining region, west-central Indiana--Continued

Date of sampling	Iron suspended recoverable ($\mu\text{g/L}$)	Iron total recoverable ($\mu\text{g/L}$)	Manganese ($\mu\text{g/L}$)	Manganese suspended recoverable ($\mu\text{g/L}$)	Manganese total recoverable ($\mu\text{g/L}$)	Dissolved solids, residue at 180 deg. C (mg/L)	Dissolved solids, (tons per AC-FT)
11-5-81	210	390	430	70	500	276	0.37
12-8-81	260	300	32	8	40	364	.49
12-29-81	0	50	84	6	90	344	.46
2-24-82	630	690	110	10	120	233	.31
3-12-82	1700	1700	96	30	130	288	.39
4-9-82	380	450	170	10	180	297	.40
5-6-82	190	240	130	40	170	337	0.45
5-31-82	22000	22000	13	800	810	121	.16
5-31-82	13000	13000	24	330	350	150	.20
6-3-82	520	530	100	20	120	347	.47
7-1-82	220	240	170	50	220	330	.44
7-8-82	31000	31000	14	990	1000	65	.08
7-8-82	21000	21000	8	690	700	82	.11
7-8-82	18000	18000	4	610	610	109	.14
10-15-82	140	320	220	0	200	306	.41

Table 3.--Chemical analyses of surface water sampled periodically at selected sites, coal-mining region, west-central Indiana--Continued

03360125 POND CREEK NEAR COAL CITY, IN

LOCATION.--Lat $39^{\circ}12'44''$, long $87^{\circ}03'42''$, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, on left bank at upstream side of bridge on County Road 108 East, 1.0 mile southeast of Coal City, 3.0 miles upstream from mouth.

Date of Sampling	Time ¹	Specific conductance	pH	Alkalinity as CaCO ₃ (mg/L)	Acidity as CaCO ₃ (mg/L)	Acidity as H (mg/L)	Hardness noncarbonate as CaCO ₃ (mg/L)	Hardness as CaCO ₃ (mg/L)	Sodium (mg/L)
10-2-81	1130	2040	8.0	210	9.9	.2	1300	1488	21
11-5-81	1100	2021	7.9	240	54	1.1	1200	1430	22
12-9-81	0920	1960	7.9	240	--	--	970	1206	23
12-30-81	1200	1520	8.5	200	14	.3	630	829	24
2-23-82	1115	1200	7.5	140	19	.4	480	620	14
3-17-82	1405	1030	7.7	180	9.9	.2	360	542	16
4-6-82	1300	1180	7.9	150	--	--	540	689	19
5-6-82	1230	1830	7.9	200	--	--	860	1061	21
6-4-82	1100	1500	7.9	181	19	.4	680	860	19
7-1-82	1345	1520	7.8	173	4.9	.1	750	926	20
8-2-82	1115	1710	7.7	191	--	--	870	1058	22

Table 3.--Chemical analyses of surface water sampled periodically at selected sites,
coal-mining region, west-central Indiana--Continued

Date of Sampling	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Silica (mg/L)	Aluminum (μ g/L)	Aluminum suspended recover- able (μ g/L)
10-2-81	4.8	200	240	7.2	.3	1200	7.5	40	40
11-5-81	4.7	210	220	13	.3	1200	6.9	50	50
12-9-81	4.7	186	180	8.0	.3	920	5.4	50	30
12-30-81	6.1	134	120	11	.2	760	7.0	20	480
2-23-82	3.7	103	88	7.8	.2	580	6.4	<10	--
3-17-82	4.0	95	74	9.3	.2	440	6.0	70	230
4-6-82	3.5	111	100	8.3	.2	580	6.8	20	150
5-6-82	4.0	161	160	6.6	.3	920	5.8	20	30
6-4-82	3.9	130	130	7.1	.2	750	--	20	160
7-1-82	4.0	140	140	6.5	.2	760	6.6	20	260
8-2-82	4.5	160	160	7.4	.2	890	8.2	30	60

Table 3.--Chemical analyses of surface water sampled periodically at selected sites,
coal-mining region, west-central Indiana--Continued

Date of Sampling	Aluminum, total recoverable ($\mu\text{g/L}$)	Iron ($\mu\text{g/L}$)	Iron, suspended recoverable ($\mu\text{g/L}$)	Iron, total recoverable ($\mu\text{g/L}$)	Manganese ($\mu\text{g/L}$)	Manganese, suspended recoverable ($\mu\text{g/L}$)	Manganese, total recoverable ($\mu\text{g/L}$)	Dissolved solids, residue at 180 DEG. C (mg/L)	Dissolved solids (tons per AC-FT)
10-2-81	80	40	290	330	3300	0	3100	2000	2.7
11-5-81	100	80	410	490	2300	0	2300	1970	2.6
12-9-81	80	120	420	540	2700	100	2800	1840	2.5
12-30-81	500	120	2000	2100	2300	100	2400	1350	1.8
2-23-82	800	260	1100	1400	3000	0	2800	1030	1.4
3-17-82	300	26	1400	1400	2300	0	2300	824	1.1
4-6-82	170	49	640	690	2700	0	2500	981	1.3
5-6-82	50	72	450	520	3000	200	3200	1640	2.2
6-4-82	180	25	730	750	2800	200	3000	1340	1.8
7-1-82	280	9	700	710	2	2400	2400	1370	1.8
8-2-82	90	27	470	500	2600	100	2700	1880	2.0

¹For example, 1445 is the same as 2:45pm.

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water

at selected sites, coal-mining region, west-central Indiana

03342110 HOOKER CREEK NEAR LEWIS, IN

INSTRUMENTATION: U.S. Geological flow thru monitor.

LOCATION.--Lat 39°14'39", long 87°16'40", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 9 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 1100 North, 1.0 mile east of County Road 600 East, 1.4 miles southwest of Lewis, and 4.4 miles north of Hymera.

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

pH, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	7.7	---	---	---	---	---	---	---	---	---
2	---	---	7.8	---	---	---	---	---	---	---	---	---
3	---	---	7.8	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	7.5	---	---	---	---	---	---
6	---	---	---	---	---	7.5	---	---	---	---	---	---
7	---	---	---	---	---	7.6	---	---	---	---	---	---
8	---	---	---	---	---	7.7	---	---	---	---	---	---
9	---	---	---	---	---	7.8	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	7.7	7.4	7.5	---	---	---
12	---	---	---	---	---	---	7.7	7.5	7.4	---	---	---
13	---	---	---	---	---	---	---	7.4	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	7.6	---	---	---
16	---	---	---	---	---	---	---	7.5	---	7.5	---	---
17	---	---	---	---	---	---	---	---	7.6	---	7.6	---
18	---	---	---	---	---	---	---	---	---	---	7.6	---
19	---	---	---	---	---	7.5	---	---	7.5	---	7.5	---
20	---	---	---	---	---	---	7.5	---	7.6	7.6	7.4	---
21	---	---	---	---	---	7.5	---	---	---	---	7.5	---
22	---	---	---	---	---	7.6	---	---	---	---	7.2	---
23	---	---	---	---	---	7.6	---	7.5	---	---	7.4	---
24	---	---	---	---	---	7.6	---	7.7	7.7	7.4	7.6	---
25	---	---	---	---	---	7.6	---	7.7	7.7	7.4	7.5	---
26	---	---	---	---	---	---	---	---	---	7.5	---	---
27	---	---	---	---	---	---	---	---	---	7.2	---	---
28	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
29	---	---	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
30	---	---	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
31	---	---	---	---	---	---	---	---	---	---	---	---

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

DAY	pH, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.8	---	---	---	---	---	---	---	---
2	---	---	7.7	---	---	---	---	---	---	---	---	---
3	---	---	7.8	---	---	---	---	---	---	---	---	---
4	---	---	7.7	---	---	---	---	---	---	---	---	---
5	---	---	7.7	---	7.6	---	---	---	---	---	---	---
6	---	---	7.8	---	---	---	---	---	---	---	---	---
7	---	---	7.7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	7.6	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	7.6	7.5	---	---	---	---
17	---	---	---	---	---	---	7.7	7.7	---	---	---	---
18	---	---	---	---	---	---	7.5	7.6	---	---	---	---
19	---	---	---	---	---	---	7.6	7.6	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	521	---	---	---	---	---	---	---	---	---
2	---	---	502	---	---	---	---	---	---	---	---	---
3	---	---	493	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	239	---	---	---	---	---	---
6	---	---	---	---	---	384	---	---	---	---	---	---
7	---	---	---	---	---	458	---	---	---	---	---	---
8	---	---	---	---	---	474	---	---	---	---	---	---
9	---	---	---	---	---	463	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	254	---	---	---
11	---	---	---	---	---	---	525	497	435	---	---	---
12	---	---	---	---	---	---	539	540	429	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	464	---	---	---	---
17	---	---	---	---	---	---	---	513	---	---	---	---
18	---	---	---	---	---	---	---	312	---	---	---	---
19	---	---	---	---	---	---	---	379	---	---	---	---
20	---	---	---	---	422	---	---	476	---	---	---	---
21	---	---	---	---	483	---	---	---	---	---	---	---
22	---	---	---	---	498	---	---	---	---	---	---	---
23	---	---	---	---	450	---	358	---	---	---	---	---
24	---	---	---	---	426	---	513	---	---	---	---	---
25	---	---	---	---	472	---	558	384	---	---	---	---
26	---	---	---	---	---	---	---	416	---	---	---	---
27	---	---	---	---	---	---	---	214	---	---	---	---
28	344	397	450	491	31	---	---	403	---	---	478	---
29	---	---	---	---	---	---	---	430	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water

at selected sites, coal-mining region, west-central Indiana--Continued

DAY	SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	425	--	--	--	--	--	--	--	--
2	--	--	--	405	--	--	--	--	--	--	--	--
3	--	--	--	205	--	--	--	--	--	--	--	--
4	--	--	--	278	--	--	--	--	--	--	--	--
5	--	--	--	423	--	--	--	--	--	--	--	--
6	--	--	--	467	--	--	--	--	--	--	--	--
7	--	--	--	435	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	368	267	--	--	--	--
18	--	--	--	--	--	--	405	409	--	--	--	--
19	--	--	--	--	--	--	169	--	--	--	--	--
20	--	--	--	--	--	--	293	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.5	7.0	---	---	---	---	---	---	---	---	---
2	---	7.0	3.0	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	7.0	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	8.0	---	---	---	---	---	---
7	---	---	---	---	---	8.5	---	---	---	---	---	---
8	---	---	---	---	---	8.5	---	---	---	---	---	---
9	---	---	---	---	---	9.5	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	17.0	14.0	20.5	---	---	---
12	---	---	---	---	---	---	17.5	13.5	22.5	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	14.5	---	---	---	---
17	---	---	---	---	---	---	---	15.0	---	---	---	---
18	---	---	---	---	---	---	---	13.0	---	---	---	---
19	---	---	---	---	---	---	---	11.0	---	---	---	---
20	---	---	---	---	6.5	---	---	13.0	---	---	---	---
21	---	---	---	---	6.5	---	---	---	---	---	---	---
22	---	---	---	---	7.5	---	---	---	---	---	---	---
23	---	---	---	---	5.0	---	15.5	---	---	---	---	---
24	---	---	---	---	5.0	---	12.0	---	---	---	---	---
25	---	---	---	---	7.0	---	11.0	19.0	---	---	---	---
26	---	---	---	---	---	---	---	---	19.0	---	---	---
27	---	---	---	---	---	---	---	---	19.5	---	---	---
28	8.0	2.0	---	---	---	---	---	---	19.5	---	---	---
29	---	2.5	---	---	---	---	---	---	19.0	---	---	---
30	---	3.5	---	---	---	---	---	---	19.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

Table 4.-Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	—	—	—	.5	—	—	—	—	—	—	—	—
2	—	—	—	1.0	—	—	—	—	—	—	—	—
3	—	—	—	5.0	—	—	—	—	—	—	—	—
4	—	—	—	4.0	—	—	—	—	—	—	—	—
5	—	—	—	1.5	—	—	—	—	—	—	—	—
6	—	—	—	2.0	—	—	—	—	—	—	—	—
7	—	—	—	1.0	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

03360125 POND CREEK NEAR COAL CITY, IN

INSTRUMENTATION: U.S. Geological flow thru monitor.

LOCATION.--Lat $39^{\circ}12'44''$, long $87^{\circ}03'42''$, in NE $\frac{1}{4}$ sec. 22, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, on left bank at upstream side of bridge on County Road 108 East, 1.0 mile southeast of Coal City, 3.0 miles upstream from mouth.

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water

at selected sites, coal-mining region, west-central Indiana--Continued

pH, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	7.8	7.7	7.8	7.6	7.7	7.8	7.5	7.2	7.3	7.5	7.5
2	7.6	7.8	7.8	7.9	7.7	7.7	7.8	7.5	7.2	7.3	7.4	7.5
3	7.6	7.8	7.8	7.9	7.7	7.8	7.8	7.5	7.1	7.4	7.4	7.5
4	7.6	7.8	7.8	7.8	7.7	7.6	7.7	7.5	7.1	7.3	7.5	7.6
5	7.6	7.8	7.8	7.8	7.6	7.3	7.7	7.5	7.1	7.4	7.5	7.6
6	7.6	7.8	7.8	7.6	7.7	7.2	7.7	7.5	7.2	7.4	7.6	7.6
7	7.6	7.8	7.8	7.8	7.8	7.0	7.8	7.7	7.1	7.3	7.5	7.6
8	7.6	7.8	7.7	7.7	7.8	7.2	7.8	7.7	7.1	7.3	7.5	7.6
9	7.7	7.8	7.7	7.7	7.8	7.3	7.8	7.7	7.3	7.3	7.5	7.6
10	7.7	7.8	7.7	7.7	7.7	7.3	7.5	7.3	7.3	7.4	7.5	7.6
11	7.7	7.8	7.8	7.7	7.2	7.7	7.3	7.4	7.2	7.4	7.6	7.6
12	7.7	7.8	7.8	7.8	7.1	7.8	7.2	7.1	7.1	7.4	7.5	7.6
13	7.7	7.8	7.9	7.9	7.1	7.1	7.8	7.3	7.3	7.4	7.5	7.6
14	7.7	7.8	7.9	7.9	7.7	7.1	7.8	7.8	7.1	7.1	7.4	7.5
15	7.7	7.8	7.8	7.8	7.0	7.0	7.8	7.8	6.9	7.1	7.4	7.5
16	7.7	7.9	7.9	7.7	6.8	7.8	7.7	7.2	7.2	7.4	7.6	7.6
17	7.6	7.8	7.9	7.7	6.8	7.8	7.7	7.5	7.2	7.4	7.6	7.6
18	7.7	7.8	7.9	7.7	7.0	7.8	7.7	7.4	7.2	7.4	7.6	7.6
19	7.7	7.8	8.0	7.7	7.2	7.8	7.7	7.5	7.2	7.4	7.6	7.6
20	7.7	7.8	7.9	7.7	7.3	7.8	7.7	7.5	7.2	7.4	7.6	7.6
21	7.7	7.8	7.8	7.7	7.5	7.8	7.8	7.5	7.2	7.5	7.6	7.6
22	7.8	7.9	7.8	7.9	7.4	7.8	7.6	7.5	7.2	7.5	7.8	7.7
23	7.7	7.8	7.8	7.9	7.5	7.7	7.5	7.5	7.2	7.5	7.7	7.7
24	7.6	7.8	7.9	7.8	7.6	7.7	7.7	7.4	7.2	7.5	7.6	7.7
25	7.7	7.9	7.7	7.7	7.7	7.7	7.7	7.7	7.2	7.3	7.4	7.6
26	7.7	7.9	7.8	7.7	7.7	7.7	7.6	7.1	7.3	7.4	7.6	7.6
27	7.7	7.5	7.9	7.8	7.7	7.6	7.6	7.0	7.3	7.4	7.6	7.7
28	7.6	7.5	7.8	7.8	7.6	7.6	7.6	7.1	7.3	7.4	7.6	7.7
29	7.7	7.7	7.8	7.8	7.5	7.5	7.5	7.1	7.3	7.5	7.6	7.7
30	7.8	7.8	7.8	7.9	7.2	7.5	7.1	7.3	7.5	7.5	7.6	7.6
31	7.7	—	7.8	7.8	—	—	7.7	—	—	7.5	7.5	7.5

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

DAY	pH, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.7	7.8	—	—	7.6	7.4	7.6	6.9	—	—	—
2	—	7.7	7.8	—	—	7.5	7.4	7.6	7.1	—	—	—
3	—	7.7	7.9	—	—	7.6	7.3	7.6	7.1	—	—	—
4	—	7.7	—	—	—	7.6	7.4	7.6	7.3	—	—	—
5	—	7.7	7.9	—	—	7.6	7.4	7.5	7.6	—	—	—
6	—	—	7.8	7.9	—	—	7.6	7.4	7.5	7.6	—	—
7	—	—	7.8	7.8	—	—	7.6	7.5	7.3	7.4	—	—
8	—	—	7.8	7.9	—	—	7.7	7.5	7.4	7.4	—	—
9	—	—	7.8	7.9	—	—	7.7	—	—	7.4	—	—
10	—	—	7.9	8.0	—	—	—	—	7.5	7.4	—	—
11	—	—	7.8	8.0	—	—	—	7.5	7.5	7.5	—	—
12	—	—	7.8	7.9	—	—	—	7.5	7.5	7.5	—	—
13	—	—	7.9	7.9	—	—	—	7.5	7.5	7.5	—	—
14	—	—	7.9	7.9	—	—	—	7.6	7.5	7.5	—	—
15	—	—	7.9	7.9	—	—	—	7.6	7.5	7.5	—	—
16	7.7	7.8	7.9	—	—	—	—	7.3	7.5	7.5	—	—
17	7.7	7.8	7.8	—	—	—	—	7.0	7.5	7.5	—	—
18	7.7	7.8	7.8	—	—	—	—	7.3	7.5	7.5	—	—
19	7.7	7.8	7.6	—	—	—	—	7.3	7.5	7.5	—	—
20	7.7	7.9	7.6	—	—	—	—	7.4	7.5	7.5	—	—
21	7.7	7.9	7.6	—	—	—	—	7.5	7.5	7.6	—	—
22	7.7	7.9	—	—	—	—	—	7.5	7.5	7.6	—	—
23	7.8	7.9	—	—	—	7.5	—	7.5	7.6	7.6	—	—
24	7.8	7.8	—	—	—	7.5	—	7.5	7.6	7.6	—	—
25	7.8	7.9	—	—	—	7.6	—	7.5	7.6	7.6	—	—
26	7.7	7.8	—	—	—	7.6	—	7.5	7.5	7.6	—	—
27	7.7	7.8	—	—	—	7.6	—	7.6	7.2	7.5	—	—
28	7.8	7.9	—	—	—	7.6	—	7.6	7.3	7.2	—	—
29	7.7	7.9	—	—	—	—	—	—	7.0	7.4	—	—
30	7.7	7.8	—	—	—	—	—	7.3	7.6	6.8	—	—
31	7.7	—	—	—	—	—	—	7.3	—	6.9	—	—

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water

at selected sites, coal-mining region, west-central Indiana--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	2010	1820	1930	1650	1720	1570	1360	1620	1800	1980	1780
2	2080	2060	1840	1950	1470	1750	1630	1420	1640	1810	2000	1700
3	2100	2060	1870	1990	1520	1760	1620	1490	1660	1830	2010	1760
4	2100	2020	1920	2080	1690	1540	1500	1570	1690	1760	2220	1960
5	2120	2040	1950	2220	1820	883	1450	1490	1750	1720	1920	2030
6	2140	2070	1960	2260	1850	1230	1540	1230	1700	1800	1660	2080
7	2160	2110	1960	2190	1810	1340	1640	1370	1760	1880	1850	2110
8	2170	2090	1890	2160	1820	1420	1720	1530	1840	1890	2110	2150
9	2140	2100	1660	2160	1860	1490	1640	1550	1860	1920	2080	2160
10	2150	2100	1670	2160	1320	1570	1150	788	1110	1950	2130	2170
11	2150	2110	1780	2150	1140	1690	1040	898	1400	1920	2180	2190
12	2130	2130	1760	1750	1370	1770	1030	1130	1550	1950	2140	2210
13	2150	2150	1820	2180	1470	1770	1200	1270	1610	1900	2180	2230
14	2160	2150	1830	2170	1490	1820	1310	953	1670	1980	2220	2230
15	2160	2150	1830	2170	1420	1820	1410	922	1680	1920	1910	2210
16	2190	2150	1830	2110	1170	1790	1510	1120	1690	1890	1930	2110
17	1800	1950	1880	2120	1130	1830	1520	1260	1680	1960	1990	2000
18	1760	1950	1890	2170	1060	1850	1530	857	1700	1990	2080	1940
19	1910	2030	1880	2220	1070	1820	1530	940	1710	2000	2120	2020
20	1980	2070	2060	2180	992	1880	1290	1150	1720	1800	2150	2060
21	2030	2080	2130	1830	1320	1920	1420	1320	1300	1780	2080	2090
22	2080	2120	2140	1480	1860	1290	1460	1350	1820	2090	2050	2030
23	2090	2130	2080	1400	1830	922	1590	1470	1860	2080	2080	2030
24	1840	2060	2020	1970	1300	1920	1240	1260	1560	1870	2090	2070
25	1740	2080	2070	1840	1450	1850	1370	831	1580	1900	2100	2110
26	1900	2090	2100	1720	1500	1930	1470	911	1600	1890	2100	2210
27	1840	1730	2080	1790	1630	1540	1530	645	1650	1900	2090	2200
28	1590	1530	2080	1810	1660	1610	1550	1070	1670	1890	2020	2150
29	1780	1630	2070	1890	1600	1250	1360	1730	1940	1770	2000	2030
30	1880	1770	1990	1990	1260	1280	1460	1790	1930	1830	1890	1890
31	1940	---	1960	2100	1480	---	1540	---	1960	1960	1890	---

Table 4.-Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	2150	1560	---	---	---	---	---	1940	---	---	---
2	---	2170	1710	---	---	---	---	1960	---	---	---	---
3	---	2240	1860	---	---	---	---	1960	---	---	---	---
4	---	2230	1860	---	---	---	---	2050	---	---	---	---
5	---	2170	1930	---	---	---	---	---	---	---	---	---
6	---	2150	2020	---	---	---	---	2030	---	---	---	---
7	---	2150	2040	---	---	---	---	1240	---	---	---	---
8	---	2160	2030	---	---	---	---	1140	---	---	---	---
9	---	2170	2050	---	---	---	---	1440	---	---	---	---
10	---	2160	1940	---	---	---	---	1610	---	---	---	---
11	---	2170	1970	---	---	---	---	1740	---	---	---	---
12	---	2190	2010	---	---	---	---	1850	---	---	---	---
13	---	2220	2000	---	---	---	---	1990	---	---	---	---
14	---	2230	1990	---	---	---	---	2050	---	---	---	---
15	---	2250	1960	---	---	---	---	1970	---	---	---	---
16	2160	2230	1940	---	---	---	---	1900	---	---	---	---
17	1870	2170	1930	---	---	---	---	2000	---	---	---	---
18	1650	2190	1950	---	---	---	---	---	---	---	---	---
19	1730	2240	2040	---	---	---	---	---	---	---	---	---
20	1810	1980	2120	---	---	---	---	---	---	---	---	---
21	1890	1980	2060	---	---	---	---	---	---	---	---	---
22	1810	2040	---	---	---	---	---	---	---	---	---	---
23	1900	2070	---	---	---	---	---	---	---	---	---	---
24	2060	1970	---	---	---	---	---	---	---	---	---	---
25	2100	2050	---	---	---	---	---	---	---	---	---	---
26	2090	1930	---	---	---	---	---	---	---	---	---	---
27	1970	1600	---	---	---	---	---	---	---	---	---	---
28	2000	1800	---	---	---	---	---	---	---	---	---	---
29	2030	1930	---	---	---	---	---	---	---	---	---	---
30	2080	1870	---	---	---	---	---	---	---	---	---	---
31	2120	---	---	---	---	---	---	---	---	---	---	---

Table 4.--Monitoring of pH, specific conductance, and temperature of surface water

at selected sites, coal-mining region, west-central Indiana--Continued

TEMPERATURE, WATER (DEG. C.), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	10.0	8.5	3.0	7.5	15.5	19.0	19.5	24.5	23.0	24.0	24.0
2	19.0	9.5	7.5	2.5	1.0	7.0	14.5	18.0	21.5	24.0	24.0	23.5
3	15.5	11.5	5.0	3.0	1.0	6.0	15.5	18.5	22.5	23.0	24.0	22.5
4	13.5	11.5	5.5	1.5	1.0	6.0	16.0	19.5	23.5	22.0	24.5	23.0
5	13.5	10.0	8.5	1.0	1.0	6.5	13.0	19.5	23.0	22.5	24.5	22.0
6	13.5	9.5	10.5	1.0	2.0	11.0	13.5	16.5	23.0	24.0	24.5	22.0
7	14.5	12.0	11.0	1.5	2.5	17.5	14.0	15.5	22.0	25.0	25.0	21.5
8	15.5	12.5	11.0	1.0	3.0	12.5	14.0	17.0	22.5	26.0	23.0	21.5
9	17.0	13.0	9.0	1.0	3.0	13.0	16.5	18.0	24.5	26.0	23.0	20.0
10	17.0	11.0	6.5	1.0	2.5	11.0	16.0	16.5	23.0	26.0	23.5	20.0
11	14.5	9.0	6.5	1.0	5.0	6.0	18.5	15.0	22.0	25.0	23.5	21.5
12	13.0	9.0	7.0	---	11.5	7.0	19.5	18.5	22.5	25.5	22.5	22.0
13	13.0	9.0	5.0	---	13.5	8.5	20.5	18.5	24.0	27.0	23.0	23.0
14	14.5	10.0	4.5	1.5	14.5	7.5	17.5	18.5	25.0	27.0	23.0	22.5
15	16.0	9.0	5.5	2.0	18.0	7.0	15.5	21.5	25.5	24.5	23.5	21.5
16	17.0	8.0	5.0	1.5	12.5	7.5	14.0	22.5	23.0	25.0	23.0	19.0
17	17.5	6.5	3.0	1.0	13.5	7.5	17.5	17.5	21.5	25.0	21.5	16.5
18	16.5	6.0	5.0	1.5	7.0	7.5	18.5	14.0	22.0	25.5	21.0	16.5
19	13.5	5.0	2.0	2.0	5.5	5.5	16.0	13.5	21.0	25.0	22.0	16.5
20	14.0	5.5	.5	2.0	5.5	6.0	14.5	15.5	22.0	25.5	22.0	18.0
21	14.5	5.5	.5	2.0	6.5	7.5	14.0	17.5	22.5	24.5	22.0	18.5
22	14.5	5.5	1.0	---	7.5	7.5	14.5	19.0	23.5	23.0	22.5	17.5
23	14.5	7.5	2.5	---	5.5	8.0	16.5	20.0	23.0	21.5	22.5	16.0
24	13.5	7.5	2.0	2.5	6.0	9.0	14.0	20.0	23.5	23.0	16.0	16.0
25	11.5	5.0	1.0	3.5	7.0	10.0	14.5	21.0	24.0	24.0	24.0	18.0
26	10.5	4.5	1.5	4.5	7.5	12.0	18.0	23.0	22.5	24.0	24.0	20.0
27	9.5	5.0	2.0	3.5	8.5	14.0	20.0	18.5	22.5	25.0	23.0	20.0
28	10.0	6.5	2.0	3.5	9.5	14.5	21.0	20.5	22.5	23.5	23.0	17.0
29	9.0	5.5	3.0	2.5	---	14.5	20.0	21.0	24.0	21.0	23.5	14.5
30	9.0	5.5	3.0	2.5	---	17.5	19.5	21.0	24.0	21.0	24.5	17.0
31	9.5	---		3.0	2.0	---	17.0	---	20.5	---	22.0	25.5

Table 4.—Monitoring of pH, specific conductance, and temperature of surface water at selected sites, coal-mining region, west-central Indiana--Continued

TEMPERATURE, WATER (DEG. C.), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	15.0	7.5	---	---	7.5	13.5	18.0	25.5	---	---	---
2	---	15.5	6.5	---	---	7.5	14.0	18.5	23.0	---	---	---
3	---	15.0	6.0	---	---	6.0	11.0	18.5	24.0	---	---	---
4	---	15.5	6.0	---	---	5.5	10.5	---	21.5	---	---	---
5	---	14.5	4.5	---	---	4.5	9.0	19.5	21.0	---	---	---
6	---	11.5	4.5	---	---	4.5	7.5	20.0	21.0	---	---	---
7	---	10.0	5.5	---	---	4.5	7.5	18.0	20.5	---	---	---
8	---	10.5	5.0	---	---	4.5	6.5	18.5	21.5	---	---	---
9	---	10.5	3.5	---	---	5.0	6.5	20.0	22.5	---	---	---
10	---	8.0	2.5	---	---	---	8.0	20.5	23.0	---	---	---
11	---	8.5	3.0	---	---	---	10.0	21.0	23.5	---	---	---
12	---	8.0	2.5	---	---	---	12.0	21.5	22.0	---	---	---
13	---	8.0	3.0	---	---	---	13.5	22.0	22.5	---	---	---
14	---	8.0	4.0	---	---	---	14.0	22.5	21.5	---	---	---
15	---	8.0	3.5	---	---	---	15.0	22.5	22.0	---	---	---
16	17.0	9.0	2.5	---	---	---	16.5	23.5	20.5	---	---	---
17	15.5	8.5	2.0	---	---	---	16.0	23.5	20.0	---	---	---
18	14.5	8.5	2.0	---	---	---	15.5	22.0	21.0	---	---	---
19	12.0	10.0	1.5	---	---	---	15.0	22.5	21.0	---	---	---
20	12.0	7.5	1.5	---	---	---	16.0	23.0	20.5	---	---	---
21	14.0	5.5	1.5	---	---	---	15.0	22.5	21.5	---	---	---
22	12.0	4.5	---	---	---	8.5	---	15.0	22.5	21.0	---	---
23	9.5	5.0	---	---	---	6.0	---	15.5	20.5	21.0	---	---
24	8.0	6.0	---	---	---	5.0	---	15.5	21.0	21.5	---	---
25	9.5	6.5	---	---	---	---	---	17.0	22.0	22.0	---	---
26	11.5	9.5	---	---	4.5	---	6.0	---	16.5	23.0	23.0	---
27	11.5	8.0	---	---	---	6.5	---	15.5	23.5	23.0	---	---
28	10.5	6.5	---	---	---	---	---	15.0	22.0	24.5	---	---
29	12.0	5.5	---	---	---	---	---	12.0	25.0	24.5	---	---
30	13.0	5.0	---	---	---	---	14.0	---	25.5	---	---	---
31	13.5	---	---	---	---	---	---	---	---	---	---	---

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana

[Measurements by U. S. Geological Survey, EOM, end of month]

BIG SLOUGH WELL 1.

392326087134900. Local number, BS 1.

LOCATION.--Lat $39^{\circ}23'26''$, long $87^{\circ}13'49''$, in SE $\frac{1}{4}$ sec. 18, T. 11 N., R. 8 W., Clay County, Hydrologic Unit 05120111, on county right-of-way, northwest of the intersection of State Highway 46 and County Road 51 South, 1.4 miles northwest of Cory and 3.5 miles east of Riley.

Owner: U.S. Geological Survey.

AQUIFER.--Clay and sand of Holocene Age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 15.0 ft, cased to 10.0 ft, screened to 15.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 576.00 ft above sea level.

PERIOD OF RECORD.--December 1980 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	573.16	573.33	575.28	574.28	574.69	574.79	573.46	574.41	574.51	
10	---	---	---	572.95	573.41	574.86	574.30	575.73	575.39	573.36	574.31	573.85	
15	---	---	574.09	572.86	573.64	574.43	574.37	576.11	574.53	573.14	574.89	573.55	
20	---	---	573.60	572.80	574.97	574.07	574.34	575.56	573.83	573.32	574.12	573.75	
25	---	---	573.36	572.95	574.79	573.77	575.12	575.64	573.92	573.25	573.52	573.31	
EOM	---	---	573.34	573.18	574.57	573.65	575.29	575.72	573.45	574.45	573.37	573.44	
MEAN	---	---	573.55	573.02	574.05	574.33	574.46	575.43	574.42	573.50	574.14	573.83	
MAX	---	---	574.09	573.33	574.99	575.36	575.39	576.11	575.39	575.12	575.35	575.13	
MIN	---	---	573.26	572.79	573.14	573.65	573.53	574.58	573.45	573.01	573.37	573.12	
WTR YR 1981 MEAN	574.10	MAX	576.11	MAY 15	MIN	572.79	JAN 17 AND OTHERS						

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	573.17	574.62	574.72	575.51	---	574.70	575.19	573.95	575.71	575.06	573.48	574.36	
10	573.36	574.36	574.42	574.33	---	575.19	575.37	574.37	574.55	574.34	573.34	573.81	
15	573.21	574.22	574.30	574.81	---	575.86	574.72	573.92	574.43	574.03	573.04	573.60	
20	574.18	574.25	574.04	574.57	---	575.98	575.30	573.65	575.02	575.29	572.74	573.67	
25	574.37	574.42	575.30	575.70	575.49	575.43	574.54	574.65	574.44	574.29	573.94	573.44	
EOM	574.57	574.43	575.21	575.82	575.17	574.97	574.11	574.94	574.17	573.95	574.18	573.29	
MEAN	573.88	574.36	574.72	575.14	575.41	575.30	574.97	574.27	574.84	574.46	573.32	573.83	
MAX	575.12	574.66	575.70	575.90	575.75	575.98	575.72	575.79	575.75	575.35	574.18	575.28	
MIN	573.17	574.13	574.04	574.06	575.17	574.02	574.11	573.62	574.07	573.75	572.60	573.29	
WTR YR 1982 MEAN	574.48	MAX	575.98	MAR 20	MIN	572.60	AUG 23						

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	573.16	574.47	576.13	574.90	575.26	574.17	575.72	575.32	---	---	---	---
10	575.05	574.03	575.35	574.95	575.18	574.75	575.74	574.64	---	---	---	---
15	574.31	574.54	575.18	574.73	574.94	574.51	575.81	575.85	---	---	---	---
20	574.08	574.43	575.18	574.18	574.80	575.14	574.77	574.92	---	---	---	---
25	573.88	575.34	576.08	575.14	574.50	575.05	574.34	574.77	---	---	---	---
EOM	573.74	575.66	575.39	575.36	574.36	575.36	574.30	574.30	---	---	---	---
MEAN	573.99	574.72	575.55	574.86	574.98	574.91	575.18	575.17	---	---	---	---
MAX	575.07	575.78	576.13	575.42	575.86	575.75	576.00	575.85	---	---	---	---
MIN	573.14	573.78	574.94	574.16	574.35	574.17	574.12	574.52	---	---	---	---
WTR YR 1983 MEAN	574.91	MAX	576.13	DEC 4 AND OTHERS	MIN	573.14	OCT 6					

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

HOOKER CREEK WELL 1.

391438087163900. Local number HC 1.

LOCATION.--Lat $39^{\circ}14'38''$, long $87^{\circ}16'39''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 9 N., R. 8 W., Sullivan
County, Hydrologic Unit 05120111, on south side of County Road 1100 North, 20.0 ft west
of Hooker Creek, 1.4 miles southwest of Lewis, and 4.4 miles north of Hymera.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Holocene Age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 20.0 ft,
cased to 15.0 ft, screened to 20.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 537.56 ft above sea level.

PERIOD OF RECORD.--December 1980 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	529.16	530.60	531.85	532.31	523.06	528.70	530.60	531.17	531.58
10	---	---	---	529.43	530.82	531.96	532.34	524.21	529.18	530.72	531.26	531.65
15	---	---	---	529.72	530.99	532.08	532.37	525.40	529.64	530.84	531.33	531.69
20	---	---	528.09	529.96	531.32	532.17	519.11	526.41	529.98	530.95	531.39	531.72
25	---	---	528.46	530.21	531.60	532.19	520.53	527.19	530.23	531.01	531.43	531.71
EOM	---	---	528.91	530.41	531.70	532.28	521.80	528.15	530.42	531.09	531.51	531.74
MEAN	---	---	528.40	529.74	531.05	532.06	526.61	525.40	529.55	530.83	531.33	531.67
MAX	---	---	528.91	530.41	531.70	532.28	532.38	528.15	530.42	531.09	531.51	531.74
MIN	---	---	527.93	528.97	530.48	531.73	518.17	522.04	528.27	530.46	531.10	531.53
WTR YR 1981 MEAN	529.72	MAX	532.38	APR 13 AND OTHERS	MIN	518.17	APR 17					

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	531.75	531.86	531.90	532.10	532.02	532.16	532.09	531.79	532.05	531.77	532.00	532.12
10	531.76	531.86	531.88	532.11	531.95	532.07	532.01	531.72	532.05	531.95	531.99	532.18
15	531.74	531.88	531.87	532.07	531.88	532.14	531.97	531.65	531.98	532.13	531.96	532.21
20	531.76	531.93	531.80	531.96	532.12	532.39	532.04	531.58	531.96	532.13	531.92	532.22
25	531.79	531.91	531.86	531.98	532.24	532.35	532.01	531.57	531.87	532.14	531.88	532.21
EOM	531.82	531.90	531.98	532.00	532.21	532.19	531.90	531.54	531.81	532.07	531.84	532.18
MEAN	531.77	531.89	531.89	532.02	532.05	532.22	532.02	531.66	531.93	532.02	531.94	532.17
MAX	531.82	531.93	531.98	532.13	532.27	532.41	532.15	531.88	532.06	532.16	532.06	532.22
MIN	531.74	531.82	531.80	531.91	531.88	532.07	531.90	531.50	531.54	531.76	531.83	531.89
WTR YR 1982 MEAN	531.96	MAX	532.41	MAR 21	MIN	531.50	MAY 27					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE, IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	532.15	532.26	532.74	532.74	532.43	532.05	532.41	532.59	---	---	---	---
10	532.21	532.24	532.75	532.65	532.41	532.08	532.57	532.49	---	---	---	---
15	532.28	532.24	532.72	532.52	532.32	532.07	532.71	532.44	---	---	---	---
20	532.28	532.26	532.71	532.37	532.24	532.07	532.63	532.44	---	---	---	---
25	532.25	532.25	532.74	532.34	532.16	532.15	532.46	532.44	---	---	---	---
EOM	532.26	532.42	532.85	532.32	532.10	532.25	532.29	532.29	---	---	---	---
MEAN	532.23	532.27	532.72	532.52	532.31	532.11	532.51	532.47	---	---	---	---
MAX	532.28	532.42	532.87	532.83	532.45	532.25	532.71	532.59	---	---	---	---
MIN	532.14	532.24	532.44	532.32	532.10	532.05	532.27	532.32	---	---	---	---
WTR YR 1983 MEAN	532.39	MAX	532.87	DEC 28 AND OTHERS		MIN	532.05	MAR 4 AND OTHERS				

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

UNNAMED TRIBUTARY TO HONEY CREEK WELL 1.

392550087143100. Local number CR 1.

LOCATION.--Lat $39^{\circ}25'50''$, long $87^{\circ}14'31''$, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 11 N., R. 8 W., Vigo County,
Hydrologic Unit 05120111, on Amax Coal Company's Chinook Coal Mine, along access road southwest
of mine office, 3.6 miles northwest of Cory, and 1.3 miles south-southwest of North Union Church.

Owner: U.S. Geological Survey.

AQUIFER.--Reclaimed cast overburden.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 82.5 ft, cased to
77.5 ft, screened to 82.5 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 581.31 ft above sea level.

PERIOD OF RECORD.--April 1981 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	535.34	537.59	536.30	543.36	553.01
10	---	---	---	---	---	---	---	535.91	540.03	538.83	547.90	553.21
15	---	---	---	---	---	---	---	536.01	537.49	542.01	537.20	550.29
20	---	---	---	---	---	---	---	534.80	541.37	536.94	536.26	553.47
25	---	---	---	---	---	---	---	536.22	540.54	538.01	538.43	550.83
EOM	---	---	---	---	---	---	---	534.57	540.57	536.37	541.10	550.90
MEAN	---	---	---	---	---	---	---	535.37	538.33	538.77	537.79	554.05
MAX	---	---	---	---	---	---	---	537.19	543.07	542.01	541.10	554.53
MIN	---	---	---	---	---	---	---	534.57	534.66	536.37	535.53	551.02
WTR YR 1981 MEAN	542.48	MAX	554.53	SEP 30	MIN	534.57	APR 30					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	554.77	556.90	558.12	563.43	569.46	574.76	575.09	574.94	575.03	574.93	574.82	574.78
10	555.25	556.98	558.29	563.09	---	574.70	575.06	574.98	575.06	574.95	574.78	574.80
15	555.72	557.19	558.49	563.12	---	575.02	575.03	574.93	575.03	574.86	574.77	574.80
20	555.97	557.45	558.46	563.19	---	575.14	575.03	575.15	575.06	575.03	574.77	574.77
25	556.09	557.67	560.43	566.31	574.66	575.00	575.00	575.10	575.00	574.87	575.00	574.80
EOM	556.64	557.89	561.83	569.46	574.52	574.93	574.97	575.31	575.00	574.81	574.97	574.77
MEAN	555.64	557.25	559.15	564.33	571.04	574.89	575.03	575.06	575.08	574.93	574.81	574.82
MAX	556.64	557.89	561.98	569.46	574.66	575.17	575.32	575.43	575.32	575.44	575.00	575.50
MIN	554.57	556.70	558.05	561.87	569.46	574.48	574.90	574.91	574.99	574.81	574.75	574.75
WTR YR 1982 MEAN	569.24	MAX	575.50	SEP 1	MIN	554.57	OCT 2					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	574.78	574.78	---	574.90	574.84	574.79	574.91	574.86	---	---	---	---
10	574.95	574.78	---	574.90	574.84	574.79	574.94	574.88	---	---	---	---
15	574.82	574.77	---	574.84	574.83	574.77	575.00	574.90	---	---	---	---
20	574.80	574.83	---	574.79	574.79	575.05	574.87	574.97	---	---	---	---
25	574.78	574.87	---	574.87	574.78	574.78	574.84	574.91	---	---	---	---
EOM	574.83	574.96	574.93	574.86	574.78	574.86	574.88	574.88	---	---	---	---
MEAN	574.82	574.87	574.99	574.87	574.84	574.84	574.94	574.93	---	---	---	---
MAX	575.06	575.18	575.12	574.94	575.31	575.12	575.39	575.21	---	---	---	---
MIN	574.77	574.77	574.93	574.79	574.76	574.75	574.84	574.82	---	---	---	---
WTR YR 1983	MEAN	574.87	MAX	575.39	APR 14	MIN	574.75	MAR 16				

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

UNNAMED TRIBUTARY TO HONEY CREEK WELL R7A.

392558087124000. Local number R 7A.

LOCATION.--Lat $39^{\circ}25'55''$, long $87^{\circ}12'40''$, in sec. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 11 N., R. 8 W., Vigo County, Hydrologic Unit 05120111, on Amax Coal Company's Chinook Coal Mine, along a mine road southwest of the mine office, 4.0 miles northwest of Cory, and 1.2 miles south-southwest of North Union Church.

Owner: Amax Coal Company.

AQUIFER.--Reclaimed cast overburden.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 5 in., depth 65.5 ft, cased to 60.5 ft, screened to 65.5 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 590.88 ft above sea level.

PERIOD OF RECORD.--December 1980 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	554.96	555.76	556.52	557.39	565.33	564.29	562.48	562.21
10	---	---	---	---	555.61	556.52	557.83	565.32	563.77	562.29	562.48	
15	---	---	---	---	556.03	556.35	558.59	565.10	563.66	561.57	562.65	
20	---	---	556.14	555.40	555.40	556.61	560.65	565.09	563.49	561.80	562.85	
25	---	---	556.11	555.48	555.43	556.21	556.81	562.81	564.66	562.95	561.95	562.77
EOM	---	---	556.32	555.10	555.50	556.52	557.11	564.08	564.38	562.53	562.27	563.01
MEAN	---	---	556.22	555.45	555.30	555.91	556.65	559.85	564.98	563.50	562.11	562.58
MAX	---	---	556.51	556.23	555.65	556.56	557.11	564.08	565.59	564.36	562.66	563.01
MIN	---	---	556.09	555.02	554.96	555.50	556.35	557.14	564.38	562.53	561.57	562.21
WTR YR 1981 MEAN	559.85	MAX	565.59	JUN 8	MIN	554.96	FEB 5					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	563.08	563.49	563.34	565.12	569.43	574.59	577.09	577.08	577.16	577.38	577.39	577.13
10	563.07	563.25	563.51	565.93	570.35	575.21	576.97	576.92	577.40	577.69	577.17	577.47
15	563.07	563.66	563.77	567.09	571.14	575.72	577.12	576.88	577.74	577.59	577.18	577.41
20	563.14	563.73	563.69	567.21	571.96	576.62	577.14	576.94	577.61	577.60	577.08	577.36
25	563.33	563.62	563.90	567.59	572.68	576.97	577.37	576.85	577.54	577.65	576.97	577.20
EOM	563.16	563.82	564.69	568.61	573.80	577.06	577.05	577.00	577.39	577.66	576.95	576.93
MEAN	563.11	563.52	563.83	566.68	571.05	575.82	577.06	576.94	577.43	577.58	577.17	577.24
MAX	563.42	563.99	564.69	568.61	573.80	577.23	577.37	577.14	577.74	577.79	577.62	577.49
MIN	562.90	563.18	563.31	564.47	568.24	574.14	576.67	576.76	576.96	577.25	576.81	576.93
WTR YR 1982 MEAN	572.28	MAX	577.79	JUL 27	MIN	562.90	OCT 3					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	576.87	576.27	576.01	579.78	578.42	578.36	579.47	579.73	---	---	---	---
10	576.90	576.29	---	579.66	578.90	578.00	579.97	579.77	---	---	---	---
15	576.93	575.99	---	578.87	578.89	577.99	580.02	579.88	---	---	---	---
20	576.64	576.31	---	578.53	578.59	578.06	580.47	579.52	---	---	---	---
25	576.49	575.90	---	578.34	578.39	578.09	580.17	579.37	---	---	---	---
EOM	576.55	576.01	579.83	578.18	578.44	579.01	579.80	---	---	---	---	---
MEAN	576.71	576.20	577.16	579.01	578.65	578.20	579.98	579.73	---	---	---	---
MAX	577.06	576.63	579.83	579.91	578.95	579.01	580.51	580.09	---	---	---	---
MIN	576.37	575.87	576.01	578.18	578.21	577.76	579.19	579.24	---	---	---	---
WTR YR 1983	MEAN	578.25	MAX	580.51	APR 18	MIN	575.87	NOV 24				

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

UNNAMED TRIBUTARY TO HONEY CREEK WELL 6.

392615087143600. Local number CR 6.

LOCATION.--Lat 39°26'15", long 87°14'36", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 12 N., R. 8 W., Vigo County, Hydrologic Unit 05120111, along and north of County Road 14 East, northwest of Amax Coal Company's Chinook Coal Mine office, 4.5 miles northwest of Cory, and 0.9 mile southwest of North Union Church.

Owner: Amax Coal Company.

AQUIFER.--Reclaimed cast overburden.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 60.0 ft, cased to 55.0 ft, screened to 60.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 609.64 ft above sea level.

PERIOD OF RECORD.--August 1981 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	---	573.56
10	---	---	---	---	---	---	---	---	---	---	---	573.46
15	---	---	---	---	---	---	---	---	---	---	---	573.37
20	---	---	---	---	---	---	---	---	---	---	---	573.26
25	---	---	---	---	---	---	---	---	---	---	---	573.05
EOM	---	---	---	---	---	---	---	---	---	---	---	572.95
MEAN	---	---	---	---	---	---	---	---	---	---	---	573.88
MAX	---	---	---	---	---	---	---	---	---	---	---	573.32
MIN	---	---	---	---	---	---	---	---	---	---	---	573.68
												572.94
WTR YR 1981	MEAN	573.53	MAX	574.06	AUG 15	MIN	572.94	SEP 28	AND OTHERS			

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	572.93	572.30	571.33	572.22	572.60	575.06	577.25	577.41	577.67	578.14	578.35	578.04
10	572.76	571.93	571.17	572.00	572.64	575.27	577.26	577.43	577.81	578.18	578.26	578.08
15	572.62	571.87	571.15	572.16	572.91	575.98	577.41	577.36	577.87	578.20	578.21	578.10
20	572.47	571.88	570.87	572.03	574.16	576.67	577.61	577.36	578.07	578.39	578.16	578.00
25	572.35	571.65	571.37	572.32	574.45	576.91	577.57	577.27	578.05	578.32	578.14	577.88
EOM	572.38	571.52	571.69	573.00	574.57	577.06	577.48	577.61	578.08	578.32	578.09	577.42
MEAN	572.60	571.91	571.33	572.14	573.39	576.01	577.39	577.91	577.39	578.24	578.21	577.96
MAX	572.93	572.35	571.77	573.00	574.58	577.06	577.64	577.61	578.10	578.39	578.35	578.11
MIN	572.35	571.43	570.87	571.63	572.53	574.69	576.98	577.27	577.63	578.04	578.03	577.42
WTR YR 1982	MEAN	575.38	MAX	578.39	JUL 20	MIN	570.87	DEC 20				

Table 5.-Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	MEAN VALUES			
													WTR YR 1983	MEAN	MAX	MIN
5	577.12	575.69	577.69	579.08	578.49	578.08	579.06	580.14	---	---	---	---	577.12	575.69	578.49	579.06
10	576.96	575.50	577.60	579.21	578.49	577.89	579.36	579.86	---	---	---	---	576.96	575.50	577.60	579.21
15	576.68	575.29	577.74	578.83	578.35	577.70	579.95	580.07	---	---	---	---	576.68	575.29	577.74	578.83
20	576.39	575.41	577.70	578.44	578.20	577.72	579.89	579.76	---	---	---	---	576.39	575.41	577.70	578.44
25	576.05	575.17	578.33	578.47	578.10	577.66	579.90	579.57	---	---	---	---	576.05	575.17	578.33	578.47
EOM	576.04	575.74	579.04	578.23	577.88	578.31	579.90	579.90	---	---	---	---	576.04	575.74	579.04	578.23
MEAN	576.58	575.52	577.75	578.76	578.32	577.90	579.59	579.92	---	---	---	---	576.58	575.52	577.75	578.76
MAX	577.36	576.06	579.19	579.21	578.85	578.31	580.06	580.27	---	---	---	---	577.36	576.06	579.19	579.21
MIN	575.99	575.17	575.77	578.23	577.87	577.66	578.46	579.50	---	---	---	---	575.99	575.17	575.77	578.23

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

UNNAMED TRIBUTARY TO SULPHUR CREEK WELL 6.

390925087171000. Local number, MR 6.

LOCATION.--Lat 39°09'25", long 87°17'10", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 8 N., R. 8 W., Sullivan County,
Hydrologic Unit 05120111, on north side of County Road 500 North, 0.1 mile west of County Road
675 East, and 2.2 miles southwest of Hymera.

Owner: Amax Coal Company

AQUIFER.--Glacial material of Illinoian Age, consisting of clay with sand and gravel.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 17.0 ft,
cased to 12.0 ft, screened to 17.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 595.04 ft above sea level.

PERIOD OF RECORD.--March 1982 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	582.11	580.81	---	580.94	578.54	578.47
10	---	---	---	---	---	---	582.07	580.97	---	581.09	577.86	578.10
15	---	---	---	---	---	---	582.15	580.73	581.98	580.89	577.72	577.74
20	---	---	---	---	---	---	582.30	580.54	582.05	580.47	577.70	577.69
25	---	---	---	---	---	---	581.57	582.14	580.90	581.25	580.32	577.70
EOM	---	---	---	---	---	---	581.80	581.29	---	580.88	579.45	577.71
MEAN	---	---	---	---	---	---	581.54	581.99	580.81	581.59	580.57	577.99
MAX	---	---	---	---	---	---	581.88	582.40	581.19	582.09	581.17	579.24
MIN	---	---	---	---	---	---	581.27	581.29	580.43	580.88	579.45	577.68
WTR YR 1982 MEAN	580.06	MAX	582.40	APR 12 AND OTHERS	MIN	577.40	SEP 22					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	577.44	577.34	580.09	581.69	581.40	580.49	583.06	582.94	---	---	---	---
10	577.45	577.40	580.46	581.67	581.65	581.23	583.47	582.66	---	---	---	---
15	577.99	577.39	580.68	580.84	581.59	581.45	583.46	583.09	---	---	---	---
20	577.38	577.49	580.91	580.17	581.03	581.89	583.17	583.17	---	---	---	---
25	577.35	577.43	581.02	580.68	580.72	582.05	582.59	---	---	---	---	---
EOM	577.46	578.87	581.62	581.14	580.61	582.85	582.54	---	---	---	---	---
MEAN	577.48	577.57	580.55	581.08	581.32	581.54	583.11	583.04	---	---	---	---
MAX	578.00	578.87	581.73	581.85	582.15	582.85	583.88	583.52	---	---	---	---
MIN	577.34	577.34	579.01	580.14	580.43	580.43	582.23	582.66	---	---	---	---
WTR YR 1983 MEAN	580.64	MAX	583.88	APR 13	MIN	577.34	OCT 26 AND OTHERS					

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

UNNAMED TRIBUTARY TO SULPHUR CREEK WELL 1.

390958087171400. Local number MR 1.

LOCATION.--Lat 39°09'58", long 87°17'14", in SW₁SW₁NE₁ sec. 3, T. 8 N., R. 8 W., Sullivan County,
Hydrologic Unit 05120111, on reclaimed mine land owned by Amax Coal Company, near outlet of last
cut lake, 1.5 miles southeast of Hymera and 2.0 miles north-northeast of Greenville.

Owner: Amax Coal Company.

AQUIFER.--Reclaimed cast overburden.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 28.0 ft, cased
to 23.0 ft, screened to 28.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 517.03 ft above sea level.

PERIOD OF RECORD.--February 1981 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	515.81	515.16	514.46	515.39	514.34	513.66	513.25
10	---	---	---	---	---	515.46	514.51	514.85	515.44	514.16	513.81	513.20
15	---	---	---	---	---	515.36	514.19	516.03	515.32	514.08	513.68	513.11
20	---	---	---	---	---	515.10	514.23	515.76	515.02	514.13	513.54	512.97
25	---	---	---	---	---	515.55	---	514.58	515.63	514.73	513.99	513.36
EOM	---	---	---	---	---	515.48	515.81	514.61	515.69	514.45	513.76	513.32
MEAN	---	---	---	---	---	515.51	515.65	515.35	515.13	514.12	513.59	513.03
MAX	---	---	---	---	---	515.57	516.07	515.75	516.19	515.63	514.44	513.91
MIN	---	---	---	---	---	515.48	515.07	514.19	514.44	514.45	513.76	512.66
WTR YR 1981	MEAN	514.50	MAX	516.19	MAY 27	MIN	512.66	SEP 29	AND OTHERS			

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	512.07	512.97	515.75	---	515.45	515.63	515.28	515.66	515.06	514.56	515.58
10	---	512.01	512.96	515.45	---	515.38	515.63	515.30	515.57	515.19	514.20	515.33
15	---	512.02	512.98	515.27	---	515.83	515.46	515.28	515.37	515.07	514.00	515.18
20	---	512.15	513.06	515.73	---	516.23	515.65	515.25	515.24	515.01	513.77	515.08
25	512.07	512.16	515.28	515.58	---	515.65	515.50	515.25	515.06	514.91	513.60	514.89
EOM	511.99	512.48	515.66	---	515.41	515.55	515.32	515.93	515.02	514.82	513.51	514.78
MEAN	512.20	512.10	513.73	515.57	515.43	515.64	515.55	515.34	515.38	515.01	514.01	515.18
MAX	512.68	512.48	515.69	515.97	515.44	516.28	515.77	516.00	515.94	515.23	514.82	515.96
MIN	511.99	511.96	512.78	515.24	515.41	515.33	515.32	515.12	515.02	514.82	513.39	514.78
WTR YR 1982	MEAN	514.62	MAX	516.28	MAR 19	MIN	511.96	NOV 2	AND OTHERS			

Table 5.—Water levels in selected continuous-record wells, coal-mining region, west-central Indiana—Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	514.48	514.96	516.08	515.33	515.44	515.25	515.62	515.69	---	---	---	---
10	515.85	514.93	515.41	515.32	515.32	515.41	515.68	515.46	---	---	---	---
15	515.33	514.99	515.33	515.23	515.28	515.32	515.84	515.84	---	---	---	---
20	515.11	515.04	515.31	515.20	515.23	515.57	515.45	515.48	---	---	---	---
25	514.99	515.21	516.25	515.40	515.20	515.41	515.38	515.38	---	---	---	---
EOM	515.00	515.57	515.49	515.40	515.13	515.48	515.41	515.41	---	---	---	---
MEAN	515.06	515.11	515.58	515.32	515.33	515.42	515.58	515.63	---	---	---	---
MAX	515.85	515.84	516.44	515.43	515.83	515.82	516.14	516.19	---	---	---	---
MIN	514.42	514.92	515.29	515.18	515.13	515.20	515.34	515.43	---	---	---	---
WTR YR 1983 MEAN	515.37	MAX	516.44	DEC 3	MIN	514.42	OCT 6					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

POND CREEK SANDSTONE WELL 1.

391243087033900. Local number PC 1Ss.

LOCATION.--Lat $39^{\circ}12'43''$, long $87^{\circ}03'39''$, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, on south side of County Road 108 East, 1.5 miles southwest of Coal City, and 1.3 miles west-southwest of Daggert.

Owner: U.S. Geological Survey.

AQUIFER.--Bedrock of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 200.0 ft, cased to 101 ft, open end.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 551.22 ft above sea level.

PERIOD OF RECORD.--May 1982 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	531.99	531.96	531.82	531.82
10	---	---	---	---	---	---	---	---	531.97	532.07	531.77	531.87
15	---	---	---	---	---	---	---	---	532.01	531.92	531.79	531.84
20	---	---	---	---	---	---	---	---	531.97	531.96	531.74	531.84
25	---	---	---	---	---	---	---	---	531.86	531.85	531.74	531.90
EOM	---	---	---	---	---	---	---	---	531.95	531.83	531.76	531.79
MEAN	---	---	---	---	---	---	---	---	532.08	531.96	531.93	531.77
MAX	---	---	---	---	---	---	---	---	532.13	532.06	532.07	532.02
MIN	---	---	---	---	---	---	---	---	532.07	531.82	531.63	531.75
WTR YR 1982 MEAN	531.89	MAX	532.13	MAY 27	MIN	531.63	AUG 29					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	531.82	531.70	532.23	532.01	532.11	532.42	532.47	532.54	---	---	---	---
10	531.95	531.76	531.89	532.27	532.28	532.39	532.57	532.43	---	---	---	---
15	531.93	531.63	532.04	532.04	532.25	532.39	532.47	532.66	---	---	---	---
20	531.80	531.91	532.05	531.91	532.21	532.55	532.46	532.58	---	---	---	---
25	531.67	531.64	532.16	532.13	532.24	532.26	532.51	532.51	---	---	---	---
EOM	531.88	532.01	531.96	532.15	532.27	532.46	532.60	532.60	---	---	---	---
MEAN	531.80	531.82	532.00	532.09	532.24	532.40	532.53	532.60	---	---	---	---
MAX	532.03	532.07	532.23	532.27	532.54	532.60	532.77	532.75	---	---	---	---
MIN	531.62	531.63	531.69	531.86	532.08	532.24	532.44	532.43	---	---	---	---
WTR YR 1983 MEAN	532.17	MAX	532.77	APR 2	MIN	531.62	OCT 23					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

POND CREEK WELL 1.

391244087034000. Local number PC 1.

LOCATION.--Lat $39^{\circ}12'44''$, long $87^{\circ}03'40''$, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ in sec. 15, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, on north side of County Road 108 East, 1.0 mile southeast of Coal City, and 1.4 miles west-southwest of Daggett.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Holocene Age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 16.0 ft, cased to 11.0 ft, screened to 16.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 549.93 ft above sea level.

PERIOD OF RECORD.--December 1980 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	541.85	541.88	542.60	542.05	542.08	542.13	541.72	541.62	541.70
10	---	---	---	541.74	542.20	542.15	542.27	542.94	542.22	541.70	541.62	541.65
15	---	---	---	541.72	542.11	542.06	542.28	543.12	541.97	541.70	541.72	541.66
20	---	---	541.83	541.75	542.40	541.96	542.19	542.60	541.91	541.69	541.56	541.65
25	---	---	541.85	541.85	542.23	541.93	542.33	542.77	541.83	541.70	541.53	541.59
EOM	---	---	541.86	541.85	542.12	542.07	542.22	542.38	541.72	541.70	541.67	541.67
MEAN	---	541.98	541.85	541.80	542.16	542.08	542.22	542.55	541.99	541.70	541.62	541.66
MAX	---	542.04	541.91	541.87	542.53	542.60	642.66	543.85	542.32	541.72	541.74	541.78
MIN	---	541.92	541.80	541.71	541.83	541.93	542.02	542.07	541.72	541.69	541.53	541.58
WTR YR 1981 MEAN	541.97	MAX	543.85	MAY 27	MIN	541.53	AUG 24 AND OTHERS					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	541.65	541.77	541.83	542.51	542.24	542.18	542.37	541.95	542.00	541.97	541.67	541.78
10	541.68	541.74	541.79	542.16	542.09	542.13	542.26	542.11	541.89	542.38	541.60	541.70
15	541.68	541.74	541.79	541.94	542.01	542.71	542.14	541.88	541.81	541.91	541.54	541.70
20	541.74	541.77	541.98	541.82	542.64	542.78	542.34	541.82	541.78	541.82	541.47	541.69
25	541.76	541.77	542.22	542.21	542.22	542.29	542.14	541.77	541.67	541.51	541.75	
EOM	541.75	541.87	542.15	543.32	542.16	542.15	542.02	542.37	541.93	541.58	541.69	541.68
MEAN	541.72	541.76	541.99	542.22	542.33	542.35	542.27	541.99	541.91	541.94	541.55	541.76
MAX	541.82	541.87	542.59	543.32	543.29	543.01	542.86	542.49	542.54	542.87	541.72	542.47
MIN	541.62	541.72	541.76	541.82	542.01	542.08	542.02	541.77	541.67	541.58	541.43	541.66
WTR YR 1982 MEAN	541.98	MAX	543.32	JAN 31	MIN	541.43	AUG 19					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	541.71	541.88	543.09	542.21	542.38	542.02	542.48	542.47	---	---	---	---
10	542.07	541.85	542.33	542.14	542.19	542.12	542.42	542.23	---	---	---	---
15	541.89	541.93	542.19	542.04	542.12	542.05	542.68	542.59	---	---	---	---
20	541.87	541.91	542.11	542.00	542.05	542.38	542.24	542.13	---	---	---	---
25	541.84	542.14	543.60	542.14	541.99	542.21	542.11	542.11	---	---	---	---
EOM	541.84	542.36	542.45	542.16	542.01	542.26	542.25	542.25	---	---	---	---
MEAN	541.86	542.03	542.53	542.13	542.18	542.17	542.38	542.40	---	---	---	---
MAX	542.27	542.79	543.67	542.37	542.98	542.60	543.10	543.19	---	---	---	---
MIN	541.70	541.85	542.09	541.99	541.98	542.00	542.06	542.08	---	---	---	---
WTR YR 1983	MEAN	542.21	MAX	543.67	DEC 3	MIN	541.70	OCT 1				

Table 5.--Water levels in selected continuous-record wells, coal-mining region,
west-central Indiana--Continued

POND CREEK WELL 6.

391335087024000. Local number PC 6M.

LOCATION.--Lat $39^{\circ}13'35''$, long $87^{\circ}02'40''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 9 N., R. 6 W., Owen County,
Hydrologic Unit 05120203, 50 ft south of County Road 104 East Road and 0.1 mile west of State
Highway 157.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial material of Illinoian Age, consisting of clay, sand, and gravel.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 3 in., depth 11.5 ft, cased
to 9.5 ft, screened to 11.5 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 636.04 ft above sea level.

PERIOD OF RECORD.--July 1981 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	5	---	---	---	---	---	---	---	---	---	632.27	630.91	631.78
	10	---	---	---	---	---	---	---	---	---	631.86	631.23	631.50
	15	---	---	---	---	---	---	---	---	---	631.70	631.35	631.18
	20	---	---	---	---	---	---	---	---	---	631.65	631.32	631.22
	25	---	---	---	---	---	---	---	---	---	631.28	630.95	630.73
EOM	---	---	---	---	---	---	---	---	---	---	630.96	631.42	630.85
MEAN	---	---	---	---	---	---	---	---	---	---	631.67	631.20	631.23
MAX	---	---	---	---	---	---	---	---	---	---	632.38	631.64	631.90
MIN	---	---	---	---	---	---	---	---	---	---	630.96	630.91	630.48
WTR YR 1981 MEAN		631.37	MAX	632.38	JUL 1	MIN	630.48	SEP 28					

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	5	630.62	631.50	632.49	634.55	634.91	634.55	---	633.04	634.08	634.34	631.87	633.12
	10	630.95	630.99	632.44	633.98	634.53	634.53	---	634.04	633.93	634.75	632.02	632.58
	15	630.57	630.97	632.31	633.33	634.90	634.90	---	634.13	633.33	633.39	633.96	631.86
	20	631.30	631.09	631.90	632.86	634.88	634.88	---	634.42	633.02	633.65	633.36	631.48
	25	631.49	631.40	633.99	634.43	634.44	634.44	---	633.91	632.84	632.92	632.81	631.22
EOM	631.58	632.19	634.41	634.41	634.44	634.31	634.31	---	633.34	634.60	634.28	632.25	631.78
MEAN	631.06	631.30	632.89	633.97	634.61	634.47	634.08	633.40	633.73	633.68	631.69	632.21	
MAX	631.70	632.19	634.43	634.88	635.01	634.62	634.75	634.60	634.73	634.84	632.29	633.34	
MIN	630.49	630.86	631.88	632.85	634.26	634.26	633.34	632.84	632.75	632.25	630.86	631.40	
WTR YR 1982 MEAN		632.98	MAX	635.01	FEB 19	MIN	630.49	OCT 16					

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	631.21	632.01	634.93	634.21	634.45	633.57	634.70	634.51	---	---	---	---
10	632.94	631.89	634.47	634.22	634.42	634.37	634.73	634.18	---	---	---	---
15	632.93	632.61	634.31	633.89	634.30	634.14	634.73	634.77	---	---	---	---
20	632.45	632.73	634.48	633.50	634.03	634.56	634.09	634.15	---	---	---	---
25	632.12	633.72	635.01	634.30	633.78	634.35	633.65	---	---	---	---	---
EOM	631.94	634.39	634.50	634.60	633.70	634.56	633.71	---	---	---	---	---
MEAN	632.17	632.78	634.57	634.12	634.24	634.28	634.34	634.41	---	---	---	---
MAX	632.99	634.56	635.06	634.65	635.14	634.86	635.05	634.97	---	---	---	---
MIN	631.15	631.87	634.25	633.50	633.66	633.55	633.48	633.99	---	---	---	---
WTR YR 1983	MEAN	633.85	MAX	635.14	FEB 2	MIN	631.15	OCT 6				

WTR YR 1983 MEAN 633.85 MAX 635.14 FEB 2 MIN 631.15 OCT 6

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

UNNAMED TRIBUTARY TO BIG BRANCH WELL 1.

390749087164200. Local number MU 1.

LOCATION.--Lat $39^{\circ}07'49''$, long $87^{\circ}16'42''$, in NE $\frac{1}{4}$ sec. 15, T. 8 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, on county right-of-way southeast of the intersection of County Roads 700 East and 325 North, 4.1 miles south-southeast of Hymera, and 1.6 miles southeast of Greenville.

Owner: U.S. Geological Survey.

AQUIFER.--Unreclaimed mine spoil.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in., depth 19.0 ft, cased to 14.0 ft, screened to 19.0 ft.

Instrumentation: Water-stage recorder.

DATUM.--Land surface 490.44 ft above sea level.

PERIOD OF RECORD.--December 1980 to May 1983.

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	495.55	495.80	497.88	496.54	497.02	496.93	495.65	495.28	496.79
10	---	---	---	495.37	496.25	497.17	496.87	497.90	497.74	495.51	495.57	496.29
15	---	---	---	495.37	496.37	496.88	497.20	497.95	496.77	495.44	495.57	495.98
20	---	---	496.09	495.33	497.61	496.52	497.65	497.79	496.30	495.45	495.48	495.95
25	---	---	495.87	495.54	497.46	496.18	497.55	497.90	495.99	495.37	495.28	495.66
EOM	---	---	495.86	495.36	497.18	496.73	497.71	497.56	495.73	495.24	496.24	495.76
MEAN	---	---	496.07	495.46	496.69	496.81	497.15	497.63	496.61	495.46	495.53	496.14
MAX	---	---	496.59	495.75	497.78	497.88	497.92	498.10	497.74	495.71	496.24	497.38
MIN	---	---	495.78	495.24	495.72	496.13	496.30	496.89	495.73	495.24	495.20	495.51
WTR YR 1981 MEAN	496.36	MAX	498.10	MAX	497.89	MIN	495.20	AUG 4				

ALTITUDE IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
4	495.60	496.45	497.07	---	---	---	497.47	496.41	497.10	496.13	495.14	496.22
10	495.68	496.37	496.70	---	---	---	497.52	496.91	496.98	495.96	495.00	495.87
15	495.50	496.23	496.40	---	---	---	496.99	496.32	496.48	495.75	495.94	495.65
20	496.31	497.47	---	---	---	---	497.64	496.40	496.45	495.70	494.81	495.59
25	496.44	497.18	---	---	---	---	497.02	496.85	496.04	495.67	494.67	495.51
EOM	496.58	497.58	---	---	---	---	497.35	496.67	497.89	495.96	495.58	495.32
MEAN	496.04	496.74	496.87	---	---	497.35	497.26	496.89	496.67	495.57	495.03	495.79
MAX	496.92	497.60	497.74	---	---	497.35	497.86	497.89	497.85	496.26	495.97	497.03
MIN	495.49	496.22	496.32	---	---	497.34	496.67	496.18	495.96	495.54	494.54	495.32
WTR YR 1982 MEAN	496.29	MAX	497.89	MAX	497.89	MIN	494.54	JUL 29 AND OTHERS				

Table 5.--Water levels in selected continuous-record wells, coal-mining region, west-central Indiana--Continued

ALTITUDE IN FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	495.25	496.07	497.88	497.14	497.32	496.64	497.81	497.75	----	----	----	----
10	497.21	495.88	497.55	497.10	497.21	497.22	497.82	497.25	----	----	----	----
15	496.55	496.66	497.41	496.76	496.90	496.88	497.82	497.96	----	----	----	----
20	496.25	496.52	497.14	496.45	496.74	497.58	497.28	497.30	----	----	----	----
25	495.95	497.20	497.84	497.46	496.60	497.24	496.88	----	----	----	----	----
EOM	495.86	497.53	497.62	497.32	496.57	497.45	497.55	----	----	----	----	----
MEAN	496.09	496.63	497.51	497.09	497.00	497.22	497.50	497.59	----	----	----	----
MAX	497.21	497.80	497.90	497.55	497.81	497.79	497.95	497.99	----	----	----	----
MIN	495.24	495.87	497.00	496.45	496.52	496.49	496.75	497.11	----	----	----	----
WTR YR 1983 MEAN	497.07	MAX	497.99	MAY 3 AND OTHERS	MN	495.24	OCT 6					

Table 6.--Descriptions of wells where water levels were measured periodically, coal-mining region, west-central Indiana

Well	Latitude/ longitude	Land- surface altitude at well (feet)	Depth of well (feet)	Inside diameter of well casing (inches)	Length of well casing (feet)	Aquifer
Wells in Big Slough watershed						
BS-2	39° 23' 26" 87° 14' 24"	609.02	17.28	2	15.28	Material of Illinoian age.
BS-4	39° 24' 22" 87° 14' 24"	614.33	23.41	2	22.41	Do.
BS-5	39° 24' 08" 87° 13' 50"	624.65	26.14	2	24.14	Do.
BS-7	39° 23' 34" 87° 12' 58"	615.08	29.00	2	27.00	Do.
BS-9S	39° 24' 42" 87° 12' 57"	632.18	8.00	2	6.00	Do.
BS-9M	39° 24' 42" 87° 12' 57"	632.02	14.50	2	12.50	Do.
BS-10S	39° 24' 16" 87° 12' 11" ¹	640.00	8.50	2	6.50	Do.
BS-10M	39° 24' 16" 87° 12' 11" ¹	639.81	13.82	2	11.82	Do.
BS-10D	39° 24' 16" 87° 12' 11" ¹	639.86	30.70	2	28.70	Do.
BS-11	39° 23' 20" 87° 12' 26"	639.98	16.90	2	14.90	Do.
BS-12	39° 22' 31" 87° 13' 36" ¹	565.00	25.00	2	23.00	Do.

Table 6.--Descriptions of wells where water levels were measured periodically, coal-mining region, west-central Indiana--Continued

Well	Latitude/ longitude	Land- surface altitude at well (feet)	Depth of well (feet)	Inside diameter of well casing (inches)	Length of well casing (feet)	Aquifer
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Wells in Hooker Creek watershed

HC-2	39° 15' 29" 86° 16' 57"	1584.50	198.08	5	128.08	Bedrock of Penn- sylvanian age.
HC-3	39° 15' 28" 87° 15' 26"	1614.80	200.96	5	141.80	Do.
HC-4	39° 16' 37" 87° 16' 36"	1615.00	22.42	2	20.42	Material of Illinoian age.
HC-1B	39° 14' 38" 87° 16' 37"	1536.00	10.70	2	8.70	Alluvium of Holocene age.

Wells in unnamed tributary to Honey Creek watershed

CR-2	39° 25' 51" 87° 14' 33"	597.78	57.15	2	55.15	Reclaimed cast overburden.
CR-3	39° 25' 52" 87° 14' 33"	589.63	60.40	4	55.40	Do.
CR-4	39° 25' 59" 87° 14' 58"	602.74	79.81	4	74.81	Do.
CR-5	39° 26' 06" 87° 14' 36"	604.09	51.35	3	49.35	Do.
R7-B	39° 25' 54" 87° 14' 45"	590.39	88.00	5	83.00	Do.

Table 6.--Descriptions of wells where water levels were measured periodically, coal-mining region, west-central Indiana--Continued

Well	Latitude/ longitude	Land- surface altitude at well (feet)	Depth of well (feet)	Inside diameter of well casing (inches)	Length of well casing (feet)	Aquifer
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Wells in unnamed tributary to Sulphur Creek watershed

MR-1A	39° 09' 55" 87° 17' 15"	518.45	9.16	2	7.16	Reclaimed cost overburden.
MR-1B	39° 09' 55" 87° 17' 15"	518.46	43.81	2	41.81	Do.
MR-1C	39° 04' 55" 87° 17' 15"	518.63	18.98	2	16.98	Do.
MR-1D	39° 09' 55" 87° 17' 15"	518.45	13.95	2	11.95	Do.
MR-1E	39° 09' 55" 87° 17' 15"	518.56	23.38	2	21.38	Do.
MR-1SS	39° 09' 57" 87° 17' 13"	518.61	101.12	5	53.00	Bedrock of Penn- sylvanian age.
MR-2	39° 10' 01" 87° 17' 78"	1487.82	199.43	5	64.00	Do.
MR-3	39° 09' 50" 87° 17' 02"	549.09	130.02	5	64.00	Do.
MR-4	39° 09' 55" 87° 17' 06"	529.23	38.78	2	36.78	Reclaimed cost overburden.
MR-5A	39° 09' 51" 87° 17' 21"	520.40	31.32	2	32.82	Do
MR-5C	39° 09' 51" 87° 17' 21"	520.53	5.32	2	3.32	Do.
MR-5B	39° 09' 51" 87° 17' 21"	520.72	14.12	2	12.12	Do.
MR-6SS	39° 09' 25" 87° 17' 08"	594.21	197.27	5	72.00	Bedrock of Penn- sylvanian age.
MR-6B	39° 09' 25" 87° 17' 03"	1594.00	---	5	64.00	Do.
MR-7	89° 10' 17" 87° 17' 19"	1528.30	139.30	5	83.00	Do.

Table 6.--Descriptions of wells where water levels were measured periodically, coal-mining region, west-central Indiana--Continued

Well	Latitude/ longitude	Land- surface altitude at well (feet)	Depth of well (feet)	Inside diameter of well casing (inches)	Length of well casing (feet)	Aquifer
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Wells in Pond Creek watershed

PC-2S	37° 12' 45" 87° 03' 35"	570.41	39.97	2	37.97	Unreclaimed mine spoil.
PC-2M	39° 12' 45" 87° 03' 35"	574.89	50.00	3	48.00	Do.
PC-2D	39° 12' 45" 87° 03' 35"	570.64	60.83	2	50.83	Do.
PC-3	39° 12' 59" 87° 03' 09"	1623.00	10.10	2	8.10	Material of Illinoian age.
PC-3SS	39° 12' 57" 87° 03' 07"	1626.20	181.12	5	40.00	Bedrock of Penn- sylvanian age.
PC-4	39° 13' 37" 87° 04' 02"	1601.00	12.60	2	10.60	Material of Illinoian age.
PC-5	39° 13' 31" 87° 03' 28"	581.41	62.10	2	60.10	Unreclaimed mine spoil.
PC-5SS	39° 13' 37" 87° 03' 31"	582.17	201.30	5	47.00	Bedrock of Penn- sylvanian age.
PC-6S	39° 13' 36" 87° 02' 44"	636.16	5.96	2	3.96	Material of Illinoian age.
PC-6D	39° 13' 36" 87° 02' 44"	636.36	9.31	2	7.31	Do.
PC-7	39° 13' 23" 87° 03' 55"	1609.40	231.02	5	103.00	Bedrock of Penn- sylvanian age.
PC-8	39° 14' 10" 87° 03' 33"	1648.00	202.72	5	137.00	Do.

¹Altitudes from U.S. Geological Survey topographic maps; all other altitudes measured by U.S. Geological Survey.

Table 7.--Wells where water levels were measured periodically,
 coal-mining region, west-central Indiana
 [Datum is sea level]

Wells in Big Slough watershed

Well <u>BS-2</u>		Well <u>BS-4</u>		Well <u>BS-5</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
10-29-80	604.87	10-29-80	605.67	02-26-81	621.55
8-21-81	608.08	02-23-81	610.32	03-12-81	623.48
5-18-81	607.49	05-06-81	613.16	08-21-81	623.65
9-08-82	607.89	08-21-81	609.26	05-18-82	624.15
11-03-82	607.65	03-02-82	613.78		
		05-18-82	610.41		
		06-17-82	611.55		
		07-20-82	610.93		
		09-08-82	609.44		
		11-03-82	608.48		
		02-08-82	631.77		
		02-24-83	612.25		
		04-19-83	613.29		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Big Slough watershed

Well <u>BS-7</u>		Well <u>BS-9S</u>		Well <u>BS-9M</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
11-05-80	603.08	06-26-81	629.49	06-26-81	628.56
02-26-81	610.37	08-21-81	625.84	08-21-81	623.28
05-06-81	609.68	03-02-82	631.14	03-02-82	629.63
08-21-81	609.28	05-18-82	628.34	05-18-82	628.29
03-02-82	610.89	06-17-82	628.05	06-17-82	627.99
05-18-82	609.93	07-20-82	627.38	07-20-82	627.34
06-17-82	609.95	09-08-82	624.84	09-08-82	623.29
09-08-82	609.24	12-08-82	630.15	11-03-82	623.09
11-03-82	609.38	02-24-83	629.20	12-08-82	630.05
12-08-82	611.28	04-19-83	631.14	02-24-83	629.18
02-24-83	611.01			04-19-83	631.06
04-19-83	611.65				

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Big Slough watershed

Well <u>BS-10S</u>		Well <u>BS-10M</u>		Well <u>BS-10D</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
08-21-81	637.81	02-26-81	638.46	02-26-81	634.18
05-18-82	637.37	05-06-81	638.83	05-06-81	634.48
06-17-82	638.16	06-24-81	637.65	06-24-81	634.55
07-20-82	638.68	08-21-81	638.49	08-21-81	634.23
09-08-82	636.78	05-18-82	637.33	05-18-82	634.46
11-03-82	636.74	06-17-82	638.06	06-17-82	634.77
12-08-82	638.59	07-20-82	638.46	07-20-82	634.52
02-24-83	638.47	09-08-82	636.57	09-08-82	632.71
04-19-83	638.53	11-03-82	636.68	11-03-82	633.10
		12-08-82	638.61	12-08-82	635.16
		02-24-83	638.36	02-24-84	635.64
		04-19-83	638.45	04-19-83	636.02

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Big Slough watershed

Well <u>BS-11</u>		Well <u>BS-12</u>	
Date	Altitude (feet)	Date	Altitude (feet)
02-26-81	639.34	05-18-82	560.87
05-06-81	638.96	06-17-82	562.51
08-21-81	637.66	07-20-82	563.95
05-18-82	637.44	09-08-82	561.40
06-17-82	638.78	11-03-82	560.33
07-20-82	638.79	02-24-83	562.57
09-08-82	637.53	04-19-83	563.48
11-03-82	637.15		
02-24-83	639.25		
04-19-83	639.17		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Hooker Creek watershed

Well	<u>HC-1B</u>	Well	<u>HC-2</u>	Well	<u>HC-3</u>
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
05-12-82	528.28	12-23-81	529.25	12-23-81	543.02
05-26-82	528.31	01-18-82	529.13	01-18-82	543.12
06-15-82	528.46	02-22-82	528.64	02-22-82	543.61
07-20-82	529.10	05-12-82	529.66	05-12-82	544.04
09-01-82	528.96	06-15-82	529.88	06-15-82	544.44
12-02-82	530.15	07-20-82	529.71	07-20-82	544.18
01-27-83	529.01	09-01-82	529.62	09-01-82	543.22
04-18-83	529.33	11-03-82	529.72	11-03-82	542.98
		12-02-82	529.92	12-02-82	543.91
		01-27-83	530.14		
		04-18-83	530.20		
		09-13-83	528.31		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Hooker Creek watershed

Well <u>HC-4</u>	
Date	Altitude (feet)
05-26-82	614.36
06-15-82	614.58
07-20-82	614.26
09-01-82	612.18
01-27-83	614.70
09-27-83	607.18

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Honey Creek watershed

Well <u>CR-2</u>		Well <u>CR-3</u>		Well <u>CR-4</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
06-30-81	550.53	06-16-81	571.36	01-20-81	557.76
08-20-81	551.93	08-20-81	567.97	02-19-81	562.48
03-02-82	574.60	03-02-82	573.47	02-23-81	564.33
03-16-82	575.21	03-16-82	576.52	04-01-81	564.68
05-19-82	575.25	05-19-82	577.45	08-20-81	570.39
06-16-82	575.49	06-16-82	577.93	03-02-82	574.15
07-21-82	575.29	07-21-82	578.19	05-19-82	577.65
09-08-82	575.19	09-08-82	577.99	06-16-82	578.36
11-03-82	574.94	11-03-82	577.34	07-21-82	578.47
02-08-82	575.37	02-24-83	580.03	09-08-82	578.30
02-24-83	575.09	04-19-83	581.43	11-03-82	577.26
04-19-83	575.09	05-26-83	581.39	02-24-83	580.16
05-26-83	575.19	09-14-83	577.84	04-19-83	581.83
09-14-83	574.85			05-26-83	581.44
				09-14-83	577.71

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Honey Creek watershed

Well <u>CR-5</u>		Well <u>R-7B</u>	
Date	Altitude (feet)	Date	Altitude (feet)
08-20-81	573.36	05-19-82	575.98
03-02-82	575.06	06-16-82	576.70
05-19-82	577.69	07-21-82	576.54
07-21-82	578.50	09-08-82	576.36
09-08-82	578.30	11-03-82	575.40
11-03-82	576.33	02-24-83	576.90
02-24-83	578.80	04-19-83	578.28
04-19-83	580.60		
05-26-83	580.02		
09-14-83	576.62		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Sulphur Creek watershed

Well <u>MR-1A</u>		Well <u>MR-1B</u>		Well <u>MR-1C</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
01-18-82	510.85	01-18-82	514.25	01-18-82	512.56
02-24-82	510.90	02-24-82	515.00	02-24-82	513.22
05-13-82	513.48	05-13-82	515.30	05-13-82	514.82
06-16-82	514.92	06-16-82	515.37	06-16-82	515.50
07-15-82	512.82	07-15-82	515.13	07-15-82	515.65
09-07-82	513.62	09-07-82	514.51	09-07-82	515.77
12-08-82	511.36	12-08-82	515.52	12-08-82	515.28
01-27-82	512.07	01-27-83	516.21	01-27-83	515.16
05-05-83	515.25	05-05-83	516.14	05-05-83	515.62
08-25-83	515.28	08-25-83	514.48	08-25-83	515.12

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Sulphur Creek watershed

Well <u>MR-1D</u>		Well <u>MR-1E</u>		Well <u>MR-1SS</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
05-13-82	507.86	01-18-82	511.74	12-14-81	512.23
06-16-82	513.50	02-24-82	514.68	01-18-82	513.66
07-15-82	513.71	05-13-82	514.12	02-24-82	514.09
09-07-82	513.42	06-16-82	514.62	05-13-82	514.19
12-08-82	511.34	07-15-82	514.31	06-16-82	514.44
01-27-83	511.98	09-07-82	513.90	07-15-82	515.11
05-05-83	514.99	12-08-82	514.84	09-07-82	514.08
08-25-83	514.81	01-27-83	515.72	11-15-82	513.83
		05-05-83	516.69	12-08-82	514.52
		08-25-83	517.71	01-27-83	514.44
				03-09-83	514.61
				05-05-83	514.94
				09-08-83	512.52

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Sulphur Creek watershed

Well <u>MR-2</u>		Well <u>MR-3</u>		Well <u>MR-4</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
12-15-81	487.33	12-15-81	509.21	01-18-82	517.16
01-18-82	487.80	01-18-82	509.60	02-24-82	517.48
02-24-82	488.32	02-24-82	509.96	05-13-82	517.28
05-13-82	488.09	05-13-82	510.32	06-16-82	518.48
06-16-82	488.24	06-16-82	510.56	07-15-82	518.45
07-15-82	487.92	07-15-82	510.34	09-07-82	518.36
09-07-82	487.07	09-07-82	510.14	11-15-82	518.40
11-15-82	487.86	11-15-82	510.06	12-08-82	518.50
12-08-82	488.15	12-08-82	510.27	01-27-83	518.77
01-27-83	488.60	01-27-83	510.89	05-05-83	519.26
03-09-83	488.78	03-09-83	511.49	08-25-83	520.54
05-05-83	488.85	05-05-83	511.45		
09-08-83	486.20	09-07-83	511.14		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Sulphur Creek watershed

Well <u>MR-5A</u>		Well <u>MR-5B</u>		Well <u>MR-5C</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
02-24-82	518.57	02-24-82	518.54	02-24-82	519.37
05-13-82	519.13	05-13-82	519.37	05-13-82	518.87
06-16-82	518.91	06-16-82	519.95	06-16-82	519.03
07-15-82	518.20	07-15-82	519.29	07-15-82	518.08
09-07-82	517.62	09-07-82	518.52	09-07-82	518.68
11-15-82	518.27	11-15-82	518.50	11-15-82	518.70
12-08-82	518.41	12-08-82	519.55	12-08-82	518.69
01-27-83	518.42	01-27-83	519.54	01-27-83	519.01
05-05-83	519.47	05-05-83	519.91	05-05-83	519.43
08-25-83	517.38	08-25-83	518.67	08-25-83	517.51

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in unnamed tributary to Sulphur Creek watershed

Well <u>MR-6SS</u>		Well <u>MR-6B</u>		Well <u>MR-7</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
12-14-81	537.25	01-18-82	569.12	12-16-81	487.95
01-18-82	537.81	02-24-82	569.42	01-18-82	490.40
02-24-82	538.15	05-13-82	571.23	02-24-82	490.91
05-13-82	539.11	06-16-82	571.98	05-13-82	486.98
06-16-82	538.83	07-15-82	570.59	06-16-82	491.02
07-15-82	538.31	09-07-82	568.92	07-15-82	491.05
09-07-82	538.21	11-15-82	568.09	09-07-82	490.81
11-15-82	538.04	12-08-82	570.35	11-15-82	490.91
12-08-82	538.62	01-27-83	571.65	12-08-82	491.30
01-27-83	539.93	03-06-83	572.15	01-27-83	491.48
03-06-83	540.48	05-05-83	573.77	03-06-83	491.46
05-05-83	541.57	09-07-83	568.97	05-05-83	491.64
09-07-83	539.28			09-08-83	490.93

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Pond Creek watershed

Well <u>PC-2S</u>		Well <u>PC-2M</u>		Well <u>PC-2D</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
05-25-81	547.79	05-22-81	542.30	05-25-81	552.56
06-01-81	547.55	06-02-81	543.52	06-01-81	552.83
06-04-81	547.40	09-22-81	547.15	09-22-81	549.69
09-22-91	547.07	01-19-82	547.49	01-19-82	551.52
01-19-82	547.34	02-22-82	547.54	05-12-82	553.17
05-12-82	547.39	05-12-82	547.44	06-15-82	552.96
06-15-82	547.30	06-15-82	547.40	07-15-82	553.24
07-15-82	547.42	07-15-82	547.44	09-01-82	552.43
09-01-82	547.62	09-01-82	547.24	11-01-82	552.29
11-01-82	547.37	11-01-82	547.32	12-06-82	552.50
12-06-82	547.82	12-06-82	547.48	02-09-83	554.02
02-09-83	547.71	02-09-83	547.73	04-18-83	554.16
04-18-83	548.09	04-18-83	547.85	05-05-83	554.71
05-17-83	548.17	05-17-83	548.04		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Pond Creek watershed

Well <u>PC-3</u>		Well <u>PC-3SS</u>		Well <u>PC-4</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
09-22-81	617.51	12-15-81	603.89	05-22-81	594.35
01-19-82	619.40	01-19-82	603.80	01-19-82	594.23
02-22-82	622.56	02-22-82	604.20	02-22-82	595.65
05-12-82	620.69	04-27-82	604.59	05-12-82	596.86
06-15-82	618.65	05-12-82	603.31	06-15-82	596.61
07-15-82	620.32	06-15-82	603.46	07-15-82	597.34
09-01-82	619.12	07-15-82	603.10	09-01-82	594.83
11-01-82	617.96	09-01-82	603.22	11-01-82	594.52
12-06-82	622.42	11-01-82	603.25	02-06-82	596.59
02-09-83	621.32	12-06-82	603.45	02-09-83	598.37
04-18-83	621.58	02-09-83	604.33	04-18-83	599.35
05-17-83	621.73	04-18-83	604.76	05-17-83	598.88
09-20-83	606.68	05-17-83	605.02	09-27-83	591.62

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Pond Creek watershed

Well <u>PC-5</u>		Well <u>PC-5SS</u>		Well <u>PC-6S</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
06-02-81	535.65	12-15-81	524.08	05-26-81	634.29
06-04-81	535.69	01-19-82	524.72	01-19-82	633.29
09-22-81	533.05	02-22-82	526.01	02-22-82	635.24
01-19-82	531.77	04-29-82	526.64	05-12-82	633.97
05-12-82	533.53	05-12-82	530.22	06-15-82	633.62
06-15-82	533.30	06-15-82	530.14	07-15-82	634.14
07-15-82	534.63	07-15-82	530.59	09-01-82	635.69
09-01-82	532.98	09-01-82	530.15	11-01-82	632.59
11-01-82	532.52	11-01-82	529.82	12-06-82	635.30
12-06-82	532.88	12-06-82	530.27	02-09-83	634.53
02-09-83	534.52	02-09-83	531.77	04-18-83	634.36
04-18-83	534.74	04-18-83	532.06	05-17-83	634.37
05-17-83	535.19	05-05-83	532.63		
09-20-83	531.95	09-20-83	530.03		

Table 7.--Wells where water levels were measured periodically,
coal-mining region, west-central Indiana--Continued

Wells in Pond Creek watershed

Well <u>PC-6D</u>		Well <u>PC-7</u>		Well <u>PC-8</u>	
Date	Altitude (feet)	Date	Altitude (feet)	Date	Altitude (feet)
01-19-82	633.21	12-15-81	545.61	12-15-81	521.75
02-22-82	636.06	01-19-82	547.17	01-19-82	521.98
05-12-82	633.96	02-22-82	548.38	02-22-82	522.34
06-15-82	633.42	05-04-82	549.11	05-05-82	522.69
07-15-82	634.17	05-12-82	546.29	05-12-82	522.69
09-01-82	633.06	06-15-82	549.08	06-15-82	523.05
11-01-82	632.54	07-15-82	549.14	07-15-82	524.26
12-06-82	634.90	09-01-82	547.72	09-01-82	524.59
02-09-83	634.37	11-01-82	548.57	11-01-82	525.62
04-18-83	634.51	12-06-82	548.52	12-06-82	525.79
05-17-83	634.53	02-09-83	550.05	02-09-83	525.78
09-27-83	628.77	04-18-83	550.19	04-18-83	527.32
		05-05-83	550.53	05-05-83	527.27
		09-20-83	548.01	09-20-83	527.67

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana

391242086583100. BEECH CREEK DOWNSTREAM RAIN GAGE (BC-DS).

LOCATION.--Lat $39^{\circ}12'42''$, long $86^{\circ}58'31''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 9 N., R. 5 W., Owen County, Hydrologic Unit 05120203, on east side of Beech Creek, northeast of bridge on unnamed county road, 2.4 miles west-southwest of Arney, and 4.2 miles southeast of Coal City.

PERIOD OF RECORD.--October 1980 to September 1981.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR
OCTOBER 1980 TO SEPTEMBER 1981

DAY	OCT	SUMMATION VALUES											
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	a .07	.00	b .00	.00	a .76	.00	.00	.00	.00	.05	.00	a1.30	
2	a .17	.00	b .09	.00	.00	.00	.00	.00	.00	.00	.00	a1.69	
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	a .03	
4	.00	.00	.00	.00	a .86	a .67	.00	b .05	a .83	.00	.00	a .03	
5	.00	.00	b .03	.00	.00	a .24	.00	a .58	b .08	a .16	a1.58	.00	
6	.00	.00	b .05	.00	.00	.00	.00	a .23	.00	.00	b .00	.00	
7	.00	.00	a .00	.00	.00	.00	.00	a .13	.00	b .02	a .13	.00	
8	.00	.00	a .31	.00	.00	.00	.00	a .31	.00	.00	c .00	.00	
9	.00	.00	a .12	.00	.00	a .62	.00	a .50	a1.04	.00	a .29	c .00	
10	.00	.00	.00	.00	a1.62	.00	a .70	a1.75	a .60	.00	.00	---	
11	.00	.00	.00	.00	.00	.00	a .64	a .27	.00	.00	c .00	.00	
12	.00	c .00	.00	.00	.00	.00	a .16	a .11	.00	.00	c .00	.00	
13	.00	c .00	.00	.00	.00	.00	a .13	.00	.00	.00	c .00	.00	
14	.00	c .00	b c .05	.00	.00	a .11	.00	a1.32	.00	.00	a c .11	.00	
15	.00	b	b .07	.00	.00	a .11	.00	a .05	.00	a1.20	a c .02	.00	
16	a .00	c .00	a c .61	.00	a .66	.00	a .00	.00	.00	.00	a c .62	.00	
17	a .68	a .00	.00	.00	.00	.00	a .14	a .00	.00	.00	a c .08	.00	
18	.00	.00	.00	.00	a .20	.00	a .00	a1.43	.00	.00	c .00	.00	
19	.00	.00	.00	a .00	a .14	.00	.00	a .44	.00	a .02	c .00	.00	
20	.00	.00	.00	a .14	.00	.00	.00	.00	a .43	.00	c .00	.00	
21	.00	.00	a .09	.00	.00	.00	.00	.00	a1.28	.00	.00	c .00	
22	.00	a .16	a .00	a .17	.00	a .99	a .00	a .05	.00	.00	c .00	.00	
23	a .07	a .07	a .00	a .33	.00	a .28	a .00	a .00	.00	.00	c .00	.00	
24	a .80	.00	.00	.00	.00	.00	a2.09	.00	.00	.00	c .00	.00	
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	c .00	.00	
26	.00	a1.07	a .04	a .02	.00	a .38	.00	a1.90	.00	a .09	a .28	c .00	
27	a .58	a .03	a .02	.00	.00	a .06	.00	a1.18	.00	a .10	a .18	b c .06	
28	.00	a .02	.00	.00	.00	a .48	.00	a .47	a .17	a .19	a .51	c .00	
29	.00	.00	.00	a .02	.00	a .47	a .31	.00	.00	a .09	a c .48	.00	
30	.00	.00	.00	.00	a .02	a .12	.00	.00	.00	.00	c .00	.00	
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---	
TOTAL	3.33	2.02	.67	0.23	3.74	2.12	5.10	11.74	3.21	2.18	4.20	4.55	
MEAN	.11	.07	.02	.01	.13	.07	.17	.38	.11	.07	.14	.15	
MAX	1.68	1.07	.31	.14	1.62	.86	.99	2.09	1.28	.83	1.58	1.69	
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

391430086562100. BEECH CREEK UPSTREAM RAIN GAGE (BC-US).

LOCATION.--Lat $39^{\circ}14'30''$, long $86^{\circ}56'21''$, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 9 N., R. 8 W., Owen County, Hydrologic Unit 05120203, 0.6 mile northwest of Dutch Bethel Church, 1.4 miles north-northwest of Arney, and 5.8 miles east of Coal City.

PERIOD OF RECORD.--October 1980 to September 1981.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.15	c.00	b c.00	c.00	a.77	.00	c.00	.00	c.00	b .05	.00	a.98
2	a.10	c.00	b c.07	c.00	.00	.00	c.00	.00	c.00	.00	.00	a.56
3	.00	c.00	c.00	c.00	.00	.00	c.00	.00	c.00	a.10	a.02	a.02
4	.00	c.00	c.00	c.00	.00	a.83	a c.61	.00	b a.04	a.96	.00	a.02
5	.00	c.00	c.00	c.00	.00	a.25	c.00	a.55	c.06	a.09	a c1.82	.00
6	.00	c.00	b .04	c.00	.00	.00	c.00	a.25	c.00	.00	.00	.00
7	c.00	c.00	c.00	c.00	c.00	.00	c.00	.00	c.00	c.00	c.00	a.16
8	c.00	c.00	a.27	c.00	.00	.00	c.00	.00	c.00	c.00	c.00	.00
9	c.00	c.00	a.13	c.00	.00	.00	a c.28	a.39	a c.84	.00	c.00	.00
10	c.00	c.00	c.00	c.00	a1.44	.00	a c.62	a1.72	a c.49	.00	b c.04	.00
11	c.00	c.00	c.00	c.00	c.00	.00	a c.58	a.29	c.00	.00	c.00	.00
12	c.00	c.00	c.00	c.00	c.00	.00	a c.14	.00	b c.09	.00	c.00	.00
13	c.00	c.00	c.00	c.00	c.00	.00	c.00	a.11	c.00	.00	.00	.00
14	c.00	c.00	b c.04	b c.06	.00	a.00	c.00	a.61	c.00	.00	.00	a.12
15	c.00	a c.71	c.51	c.00	c.00	a.71	.00	c.00	a.35	c.00	a.63	a.02
16	c.00	c.00	c.00	c.00	c.00	.00	a c.13	a.12	c.00	.00	.00	a.67
17	c.00	c.00	c.00	c.00	c.00	.00	c.00	.00	c.00	.00	.00	a.09
18	c.00	c.00	c.00	c.00	c.00	a.00	a c.20	a.20	.00	.00	.00	.00
19	c.00	c.00	c.00	c.00	c.00	a.14	a c.40	a.17	.00	a.02	.00	.00
20	c.00	c.00	c.00	c.00	a.13	.00	b .03	c.00	.00	a.35	.00	.00
21	c.00	c.00	c.00	c.00	c.00	a.07	.00	c.00	a2.12	.00	.00	.00
22	c.00	c.00	a c.13	c.00	c.00	a.15	.00	a c.89	.00	a.02	.00	.00
23	c.00	a c.32	a c.06	c.00	c.00	a.31	.00	a c.25	.00	.00	.00	.00
24	c.00	c.00	c.00	c.00	c.00	.00	.00	a c1.70	.00	.00	.00	.00
25	c.00	c.00	c.00	c.00	c.00	.00	.00	c.00	.00	.00	.00	.00
26	a.00	a c.52	a c.89	c.00	c.00	.00	a c.34	c.00	a c1.54	.00	a.06	a.48
27	a.07	a c.07	a c.03	c.00	c.00	b .02	a c.05	c.00	a c.96	.00	a.09	a.13
28	c.00	a c.02	c.00	c.00	c.00	.00	a c.42	a c.43	c.00	.00	a.12	a.34
29	c.00	c.00	c.00	c.00	c.00	---	c.00	a c.16	a c.25	.00	.00	a.16
30	c.00	c.00	c.00	c.00	c.00	---	c.00	c.00	c.00	.00	.00	a.48
31	c.00	c.00	c.00	c.00	c.00	---	c.00	c.00	c.00	---	.00	.00
TOTAL	1.87	1.68	0.57	0.20	3.54	2.04	4.49	9.21	3.66	2.37	4.05	3.18
MEAN	.06	.06	.02	.01	.13	.07	.15	.30	.12	.08	.13	.11
MAX	.71	.89	.27	.13	1.44	.83	.89	1.72	2.12	.96	1.82	.98
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

392233087135000. BIG SLOUGH DOWNSTREAM RAIN GAGE (BS-DS).

LOCATION.--Lat $39^{\circ}22'33''$, long $87^{\circ}13'50''$, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 11 N., R. 7 W., Clay County, Hydrologic Unit 05120203, 40.0 ft north of State Road 46, 40.0 feet west of County Road 51 South Road, 1.5 miles west of Cory, 3.5 miles east of Riley, and 0.5 mile east of the Clay-Vigo County Line.

PERIOD OF RECORD.--October 1980 to May 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 SUMMATION VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	b .12	.00	b .00	.00	a .58	.00	.00	.00	.00	.00	c .00	a .94
2	b .09	.00	b .10	.00	.00	.00	a .48	.00	.00	c .00	a .41	
3	.00	.00	.00	.00	a .58	a .61	.00	a .12	a .10	a c .28	.00	
4	.00	.00	.00	.00	a .37	.00	a1.02	.00	a .51	c .00	.00	
5	.00	.00	b .03	.00					a .18	a c2.07	.00	
6	.00	.00	.00	.00	.00	.00	a .08	c .00	.00	c .00	.00	
7	.00	.00	.00	.00	.00	b .09	.00	c .00	.00	c .00	a .13	
8	.00	.00	a .23	.00	.00	a .65	a c1.35	.00	c .00	c .00	.00	
9	.00	.00	a .14	.00	.00	a .74	a1.45	a c .30	.00	b c .17	.00	
10	.00	.00	.00	a1.28	.00							
11	.00	.00	.00	.00	.00	a .24	a .02	c .00	.00	c .00	.00	
12	.00	.00	.00	.00	.00	a .08	a .00	c .00	.00	c .00	.00	
13	.00	.00	.00	.00	.00	b .00	a .16	c .00	.00	c .00	a .00	
14	.00	.00	b .05	.00	.00	b .02	a1.38	c .00	.00	b .00	a .38	
15	.00	b .09	.00	.00	.00	a .06	a .06	.00	b .07	a1.09	.00	
16	.00	a1.23	b .36	.00	a .31	.00	b .00	a .12	.00	.00	a .55	
17	.00	.00	.00	.00	.00	b .04	a1.24	.00	.00	.00	a .15	
18	.00	.00	.00	.00	b .09	.00	a .43	.00	.00	.00	.00	
19	.00	.00	.00	b .11	.00	.00	.00	.00	a .71	.00	.00	
20	.00	.00	.00						a .49	.00	.00	
21	.00	.00	.00	.00	.00	.00	.00	a .88	.00	.00	.00	
22	.00	b .00	.00	a .14	.00	a2.09	.00	a .06	.00	.00	.00	
23	a .00	b .15	.00	a .16	.00	a .06	.00	.00	.00	.00	.00	
24	a .72	.00	.00	.00	.00	.00	a .87	.00	.00	.00	.00	
25	c .00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	c .00	a c .54	a .91	a .06	.00	b .02	.00	a .21	.00	a .07	a .20	
27	b .02	.00	.00	.00	.00	b .08	a1.87	.00	a2.69	a .34	a .08	
28	.00	.00	.00	.00	.00	a .78	.00	a c .26	a .11	a .11	.00	
29	.00	.00	.00	.00	a .18	a .23	a .07	.00	c .00	a .16	a .74	
30	.00	.00	.00	.00	.00	a .05	a .69	.00	c .00	.00	.00	
31	.00	---	.00	.00	---	.00	---	.00	c .00	a .20	---	
TOTAL	2.72	1.53	0.59	0.11	2.56	1.23	5.94	9.89	2.71	5.08	4.62	3.38
MEAN	.09	.05	.02	.00	.09	.04	.20	.32	.09	.16	.15	.11
MAX	1.23	.91	.23	.11	1.28	.58	2.09	1.87	1.35	2.69	2.07	.94
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.—Precipitation at selected sites, coal-mining region, west-central Indiana—Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a.00	.00	a.00	a.09	b.00	.00	.00	a.00	.00	.00	a.2.72
2	.00	a.11	a.00	a.37	a.35	a.03	a.29	.00	a.65	.00	a.05	a.05
3	.00	a.00	a.12	a.50	.00	a.26	.00	a.00	a.1.32	.00	.00	.00
4	a.00	a.03	a.03	a.08	a.00	a.57	a.00	a.07	a.00	a.17	.00	.00
5	a.25	a.21	.00	.00	.00	a.41	.00	.00	.00	a.76	.00	.00
6	a.26	.00	.00	a.06	.00	.00	a.04	.00	.00	.00	.00	.00
7	.00	b.00	.00	.00	.00	.00	a.97	a.1.96	.00	.00	.00	.00
8	.00	b.03	.00	.00	.00	.00	a.17	.00	.00	.00	.00	.00
9	.00	a.08	.00	.00	.00	a.06	.00	.00	.00	.00	.00	.00
10	.00	.00	a.05	.00	a.11	a.04	.00	.00	a.74	a.22	.00	.00
11	.00	.00	.00	a.17	a.66	.00	.00	b.00	.00	a.06	.00	.00
12	.00	.00	.00	a.00	a.03	.00	.00	b.02	.00	.00	.00	.00
13	.00	a.05	.00	.00	a.06	a.41	.00	.00	.00	.00	a.23	a.23
14	.00	.00	.00	a.00	a.22	.00	.00	a.00	.00	.00	.00	.00
15	.00	.00	.00	a.02	a.02	.00	.00	a.26	.00	.00	.00	.00
16	.00	.00	a.03	a.81	a.33	a.83	.00	a.1.09	.00	.00	.00	.00
17	a ₁ .01	.00	.00	a.10	a.00	a.24	a.00	.00	.00	.00	a.35	a.35
18	a.04	.00	.00	a.11	a.09	a.09	a.20	a.00	a.79	.00	a.03	a.03
19	.00	a.15	.00	a.09	a.00	a.48	a.00	a.00	a.13	a.1.67	.00	.00
20	.00	a.04	.00	a.07	.00	a.12	a.13	a.54	.00	.00	b.02	b.02
21	.00	a.49	.00	a.32	a.00	.00	.00	a.29	b.00	.00	.00	.00
22	a.00	a.20	a.59	a ₁ .16	a.00	a.00	a.00	a.15	b.03	a.27	.00	.00
23	.00	a.17	.00	a.03	a.00	a.00	a.00	.00	.00	.00	a.1.43	a.1.43
24	.00	a.00	.00	b.00	a.00	a.48	.00	.00	.00	.00	.00	.00
25	a.17	.00	.00	b.02	.00	.00	.00	.00	.00	.00	.00	.00
26	a.29	a.14	a.33	a.00	.00	.00	.00	a.45	b.03	.00	a.31	.00
27	a.23	.00	a.22	a.05	.00	.00	a.64	.00	.00	a.09	.00	.00
28	.00	.00	a.08	a.00	.00	.00	a.00	a.19	a.74	.00	.00	.00
29	.00	a.00	.00	a.21	—	a.00	a.00	a.1.50	a.29	.00	.00	.00
30	.00	a.46	.00	a ₁ .62	—	a.05	.00	.00	.00	a.64	.00	.00
31	.00	—	a.12	.00	—	.00	—	a.80	—	a.15	—	—
TOTAL	2.79	1.45	2.81	4.40	1.71	3.48	2.42	5.17	4.61	6.18	3.83	3.53
MEAN	.09	.05	.09	.14	.06	.11	.08	.17	.15	.20	.12	.12
MAX	1.01	.46	1.59	1.62	.81	.66	.83	1.50	1.96	1.67	1.43	2.72
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a.02	a.11	.00	.44	.00	.60	1.14	---	---	---	---
2	.00	a.56	a.37	.00	.76	.00	.48	.11	---	---	---	---
3	.00	.00	a.28	.00	.00	.00	.06	.32	---	---	---	---
4	a.02	.00	a.34	.00	.00	.00	.00	.00	---	---	---	---
5	.00	.00	a.22	.00	.00	.39	.19	.00	---	---	---	---
6	a.63	.00	.00	.00	.04	.44	.06	.00	---	---	---	---
7	a.58	.00	.00	.00	.00	.00	.07	.34	---	---	---	---
8	a.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
9	a.45	.00	.00	a.11	.00	.00	.19	.00	---	---	---	---
10	.00	.00	.00	.00	.00	.04	.04	.00	---	---	---	---
11	.00	a.06	.00	.00	.00	.00	.00	.00	1.14	---	---	---
12	.00	a.66	.00	.00	.00	.00	.00	.25	.16	---	---	---
13	.00	.00	.00	.00	.00	.00	.00	.41	.86	---	---	---
14	.00	.00	.00	a.22	.00	.00	.00	.00	.08	---	---	---
15	.00	.00	.00	a.04	.00	.00	.00	.00	---	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---
17	.00	.00	.00	.00	.00	.00	.10	.00	---	---	---	---
18	.00	.00	.00	.00	.00	.00	.43	.00	---	---	---	---
19	.00	a.07	.00	.00	.00	.00	.00	.00	---	---	---	---
20	a.31	.00	.00	.00	.00	.00	.99	.00	---	---	---	---
21	.00	a.19	.00	.14	.00	.00	.00	.00	---	---	---	---
22	.00	.00	a.05	.45	.00	.00	.00	.00	---	---	---	---
23	.00	a.88	.04	.09	.00	.00	.00	.00	---	---	---	---
24	.00	.00	1.08	.00	.00	.00	.00	.00	---	---	---	---
25	.00	.00	1.31	.00	.00	.00	.00	.00	---	---	---	---
26	.00	a.45	.00	.00	.00	.00	.10	.00	---	---	---	---
27	.00	a.03	.87	.00	.00	.00	.69	.00	---	---	---	---
28	.00	a.62	.03	.00	.00	.00	.00	.15	---	---	---	---
29	.00	a.02	.00	.25	---	---	.00	.02	---	---	---	---
30	.00	.00	.00	---	---	---	.00	.49	---	---	---	---
31	a.18	---	.00	.00	---	---	.00	---	---	---	---	---
TOTAL	2.17	3.60	8.03	0.93	1.24	3.18	4.01	4.15	---	---	---	---
MEAN	.07	.12	.26	.03	.04	.10	.13	.24	---	---	---	---
MAX	.63	.88	3.28	.45	.76	.99	1.25	1.14	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

392443087134200. BIG SLOUGH UPSTREAM RAIN GAGE (BS-US).

LOCATION.--Lat $39^{\circ}24'43''$, long $87^{\circ}13'42''$, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 11 N., R. 7 W., Clay County, Hydrologic Unit 05120203, 2.5 miles northwest of Cory and 5.5 miles south-southwest of Staunton.

PERIOD OF RECORD.--October 1980 to May 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	b .09	.00	c .00	.00	a .59	.00	.00	.00	.00	.00	.00	a .79
2	b .06	.00	b c .10	.00	.00	.00	a .56	.00	.00	.00	.00	a .50
3	.00	.00	c .00	.00	.00	a .62	a .65	.00	a .31	a .19	a .28	a .05
4	.00	.00	b .00	.00	a .37	.00	a .21	a .13	a .25	a .69	.00	.00
5	.00	.00	b .02	.00						a .25	a .207	.00
6	.00	.00	.00	.00				a .06	.00	.00	.00	.00
7	.00	.00	.00	.00			b .06	.00	.00	.00	.00	a .15
8	.00	.00	a .22	.00			a .55	a .35	.00	.00	.00	.00
9	.00	.00	a .13	.00			a .69	a .41	a .30	b .00	.00	.00
10	.00	.00	.00	a .29						b .18	.00	
11	.00	.00	.00	.00			a .28	a .03	.00	.00	.00	.00
12	.00	.00	.00	.00			a .15	a .00	.00	.00	.00	.00
13	.00	.00	c .00	.00			a .00	a .16	.00	.00	.00	.00
14	.00	b c .06	b .00	.00			b .00	a .41	.00	b .00	.00	a .25
15	.00	b .07	b .07	.00			b .02	a .08	.00	b .16	a .17	.00
16	.00	c .00	.00	.00	a .31		.00	.00	.00	.00	.00	a .62
17	a .21	b c .40	.00	.00	.00		a .14	.00	.00	.00	.00	a .13
18	.00	c .00	.00	.00	b .00		a .00	a .22	.00	.00	.00	.00
19	.00	c .00	.00	b .00	b .06		a .42	.00	.00	a .16	.00	.00
20	.00	c .00	.00	b .07	.00		.00	.00	.00	a .51	.00	.00
21	.00	c .00	.00	.00	a .13		.00	a .21	c .00	a .88	.00	.00
22	.00	c .00	b c .17	.00	a .17		a .04	a .05	a c .06	.00	.00	.00
23	.00	a .71	c .00	.00	.00		.00	a c .87	c .00	.00	.00	.00
24	.71	c .00	c .00	.00	.00		.00	.00	c .00	.00	.00	.00
25	.00											
26	.00	c .00	.00	.00	b .07		.00	a .21	c .00	a .09	a .23	.00
27	a .54	a c .91	.00	.00	.00		b .07	a .87	c .00	a .69	a .46	a .08
28	b .02	a c .06	.00	.00	.00		a .70	.00	c .00	a .26	a .19	a .00
29	.00	c .00	b .03	.00	—		a .17	a .24	a .63	c .00	a .13	a .69
30	.00	c .00	.00	.00	—		a .07	a .16	.00	.00	.00	.00
31	.00	—	.00	.00	—		.00	—	—	.00	a .18	—
TOTAL	2.63	1.60	0.57	0.07	2.55	1.25	6.47	10.96	3.03	5.00	4.89	3.26
MEAN	.08	.05	.02	.00	.09	.04	.22	.35	.10	.16	.16	.11
MAX	1.21	.91	.22	.07	1.29	.62	2.61	1.87	1.35	2.69	2.07	.79
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	a.14	.00	.00	.00	.00	.00	.00	a.257
2	.00	a.11	.00	a.38	a.10	.00	a.35	.00	.00	a.66	.00	a.05
3	.00	.00	a.11	a.51	.00	a.00	a.41	.00	.00	a.1,61	.00	.00
4	a.03	.00	a.04	a.09	.00	a.64	.00	.00	.00	.00	a.16	.00
5	a.24	a.19	.00	.00	.00	a.41	.00	.00	.00	a.68	.00	
6	a.15	.00	.00	a.05	b.03	.00	a.04	.00	a.97	a.1,96	.00	.00
7	.00	.00	.00	.00	.00	.00	a.09	.00	.00	a.04	.00	.00
8	.00	.00	.00	.00	.00	.00	a.06	.00	.00	a.00	.00	.00
9	.00	a.07	.00	.00	.00	a.05	a.11	a.05	.00	a.76	a.22	.00
10	.00	.00	.00	.00	.00	a.11	.00	.00	.00			
11	.00	.00	.00	.00	a.17	a.71	.00	.00	.00	.00	a.08	.00
12	.00	.00	.00	.00	.00	a.42	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	a.22	.00	.00	.00	.00	.00	a.26
14	a.07	.00	.00	.00	a.02	a.02	.00	a.26	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	a.02	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	a.06	a.79	a.46	a.97	.00	a.97	.00	.00	.00
17	a.65	.00	.00	a.08	a.08	a.24	a.24	.00	.00	a.90	a.40	.00
18	a.03	.00	.00	a.09	a.10	.00	a.20	.00	a.19	a.1,80	.00	.00
19	.00	a.10	.00	a.03	a.03	.00	a.39	.00	a.17	a.75	.00	.00
20	.00	a.04	.00	a.13	.00	.00	a.17	a.13	.00			
21	.00	.00	a.26	.00	.00	.00	.00	a.29	.00	a.00	.00	.00
22	a.45	.00	a.1,50	a.1,21	.00	.00	a.15	a.15	a.11	a.52	.00	.00
23	.00	a.20	.00	a.03	.00	.00	.00	.00	.00	.00	a.00	.00
24	.00	a.02	.00	.00	.00	a.48	.00	.00	.00	.00	a.1,22	a.14
25	a.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	a.30	a.32	a.37	.00	.00	.00	.00	a.45	a.04	.00	a.34	.00
27	a.22	.00	a.23	.00	.00	.00	.00	a.64	.00	a.05	.00	.00
28	.00	.00	a.07	.00	.00	.00	.00	a.23	a.15	.00	.00	.00
29	.00	.00	a.44	.00	a.23	---	a.06	a.50	a.16	.00	a.67	.00
30	.00	.00	a.44	.00	a1.56	---	.00	.00	.00	---	a.15	---
31	.00	---	---	.11	.00	---	.00	a.80	---	.00		
TOTAL	2.29	1.49	2.69	4.28	1.47	3.61	2.75	5.17	4.67	6.44	3.57	3.42
MEAN	.07	.05	.09	a.14	a.05	a.12	a.09	a.17	a.16	a.21	.12	.11
MAX	.65	.44	1.50	1.56	.79	.71	.97	1.50	1.96	1.80	1.22	2.57
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.09	.00	.43	.00	---	1.19	---	---	---	---
2	.00	.62	.31	.00	.75	.00	---	.10	---	---	---	---
3	.00	.00	3.39	.00	.00	.00	---	.31	---	---	---	---
4	.00	.00	.39	.00	.00	.00	---	.00	---	---	---	---
5	.00	.00	.26	.00	.40	---	---	.00	---	---	---	---
6	a.72	.00	.00	.00	.05	.41	---	.00	---	---	---	---
7	a.57	.00	.00	.00	.00	.06	---	.30	---	---	---	---
8	.00	.00	.00	.00	.00	.00	---	.00	---	---	---	---
9	.46	.00	.00	.00	.00	.00	---	.00	---	---	---	---
10	.00	.00	.17	.00	.00	.00	---	.00	---	---	---	---
11	.00	.08	.00	.00	.00	.02	---	.00	---	---	---	---
12	.00	.66	.00	.00	.00	.00	---	1.47	---	---	---	---
13	.00	.00	.00	.00	.00	.00	---	.19	---	---	---	---
14	.00	.00	.00	.00	.00	.00	---	.24	---	---	---	---
15	.00	.00	.25	.00	.00	.00	---	.00	---	---	---	---
16	.00	.00	.00	.00	.00	.00	---	.04	.00	---	---	---
17	.00	.00	.00	.00	.00	.11	.00	.00	---	---	---	---
18	.00	.00	.00	.00	.00	.41	.00	---	---	---	---	---
19	.03	.08	.00	.00	.00	.00	.00	---	---	---	---	---
20	.33	.05	.00	.00	.00	.95	.00	---	---	---	---	---
21	.00	.15	.00	.13	.00	.00	.00	.00	---	---	---	---
22	.00	.00	.13	.46	.00	.00	.00	.00	---	---	---	---
23	.00	.68	.06	.10	.00	.00	.00	.00	---	---	---	---
24	.00	.00	1.09	.00	.00	.00	.00	.00	---	---	---	---
25	.00	.00	1.20	.00	.00	.00	---	.00	---	---	---	---
26	.00	.48	.00	.00	.00	.00	---	.00	---	---	---	---
27	.00	.03	.88	.00	.00	.00	---	.00	---	---	---	---
28	.00	.63	.03	.00	.00	.00	---	.14	---	---	---	---
29	.00	.04	.00	.27	---	---	---	.03	---	---	---	---
30	.00	.00	.00	.00	---	---	---	.27	---	---	---	---
31	.08	---	.00	.00	---	---	---	---	---	---	---	---
TOTAL	2.19	3.50	8.25	0.96	1.23	2.36	0.48	3.80	---	---	---	---
MEAN	.07	.12	.27	.03	.04	.10	.03	.22	---	---	---	---
MAX	.72	.68	3.39	.46	.75	.95	.27	1.47	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

391438087164000. HOOKER CREEK DOWNSTREAM RAIN GAGE (HC-DS).

LOCATION.--Lat $39^{\circ}14'38''$, long $87^{\circ}16'40''$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 9 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, 100.0 ft east of Hooker Creek, 150.0 ft south of County Road 1100 North, 1.4 miles southwest of Lewis, and 4.4 miles north of Hymera.

PERIOD OF RECORD.--October 1980 to June 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 SUMMATION VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a .08	.00	.00	.00	a .68	.00	.00	.00	.00	.00	.00	a .53
2	a .21	.00	a .25	.00	.00	.00	.00	.00	.00	.00	.00	a .17
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	a .11	.00	
4	.00	.00	.00	.00	a .95	a .53	.00	.00	a .51	.00	.00	
5	.00	.00	b .03	.00	.00	a .40	.00	a .72	a .32	a .15	a .10	.00
6	.00	.00	.00	.00	.00	.00	.00	a .11	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	a .04	.00	.00	.00	.00	a .12
8	.00	.00	a .21	.00	.00	.00	a .25	a .55	a .81	.00	.00	.00
9	.00	.00	a .18	.00	.00	a .66	a .38	a .14	a .04	a .49	a .49	.00
10	.00	.00	.00	a .138	.00							
11	.00	.00	.00	.00	.00	.00	a .26	a .05	.00	.00	.00	.00
12	.00	.00	.00	a .04	.00	b .15	a .00	a .25	.00	.00	.00	.00
13	.00	.00	a .15	.00	.00	a .00	a .21	a .00	.00	.00	.00	a .23
14	.00	.00	a .03	.00	.00	a .07	a .54	a .00	a .00	a .00	a .00	a .88
15	.00	a .07	.00	.00	a .07	.00	a .06	.00	a .48	.00	.00	
16	.00	a .55	.00	.00	a .49	.00	a .04	.00	.00	.00	.00	a .46
17	a .47	a .55	.00	.00	a .02	.00	a .03	.00	.00	.00	.00	a .23
18	.00	.00	.00	.00	a .04	a .02	a .00	a .18	.00	.00	.00	.00
19	.00	.00	.00	a .15	.00	.00	a .47	.00	.00	a .29	.00	.00
20	.00	.00	.00	a .03	.00	.00	.00	.00	.00	a .71	.00	.00
21	.00	.00	.00	a .04	.00	.00	a .99	.00	a .63	.00	.00	.00
22	.00	.00	a .16	.00	a .16	.00	a .00	a .03	.00	.00	.00	.00
23	.00	a .04	a .04	.00	a .22	.00	.00	a .00	.00	.00	.00	.00
24	a .78	.00	.00	.00	.00	.00	.00	a .96	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	a .85	a .17	.00	.00	.00	a .37	.00	a .10	a .51	a .04	
27	a .05	a .09	.00	.00	.00	a .06	a .00	a .30	.00	a .24	a .22	
28	.00	.00	.00	.00	a .09	.00	a .40	a .00	.00	a .56	a .23	
29	.00	.00	.00	.00	a .00	---	a .38	a .10	a .44	.00	a .68	a .53
30	.00	.00	---	.00	.00	---	.00	a .08	a .04	.00	a .02	a .00
31	.00	---	---	.00	---	---	.00	---	---	.00	a .07	---
TOTAL	3.10	1.89	0.74	0.34	2.99	2.25	4.07	9.57	3.18	3.08	4.37	2.53
MEAN	.10	.06	.02	.01	.11	.07	.14	.31	.11	.10	.14	.08
MAX	1.47	.85	.25	.15	1.38	.95	.99	1.54	1.14	.71	1.10	.53
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, West-Central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a.02	---	.00	a.47	.00	.00	a.04	.00	a.37	.00	a.478
2	.00	a.12	---	a.38	.00	a.30	.00	.00	a.37	.00	a.17	
3	.00	a.00	---	a.36	a.02	a.23	.00	.00	a.75	.00	.00	
4	a.03	a.07	---	a.03	a.31	a.44	a.00	a.08	.00	.00	.00	
5	a.19	a.23	---	.00	.00	a.31	.00	.00	a.1.38	.00	.00	
6	a.33	.00	---	a.13	.00	a.02	.00	a.05	.00	a.57	a.03	.00
7	.00	.00	---	.00	a.17	.00	a.1.20	a.07	a.2.80	.00	.00	
8	.00	.00	a.14	.00	a.04	.00	a.12	.00	.00	.00	.00	
9	.00	a.14	.00	.00	a.02	.00	a.14	.00	.00	a.95	a.47	.00
10	.00	.00	.00	.00	a.07	a.09	a.06	.00	.00			
11	.00	.00	.00	.00	a.29	a.29	.00	.00	.00	a.15	.00	
12	.00	.00	.00	.00	a.08	a.03	.00	a.04	.00	.00	.00	
13	a.00	.00	.00	.00	a.09	a.50	.00	.00	.00	a.25		
14	a.03	.00	.00	.00	a.06	a.40	.00	.00	.00	a.09		
15	.00	.00	.00	.00	a.05	a.05	.00	a.72	.00	.00	.00	
16	.00	a.08	.00	.00	a.93	a.69	a.98	a.16	a.60	.00	.00	
17	a.1.07	.00	.00	a.00	a.05	a.00	a.22	.00	.00	a.50		
18	a.19	.00	.00	a.09	a.13	a.55	.00	a.42	.00	.00	.00	
19	.00	a.30	.00	a.06	a.06	a.70	.00	a.00	a.15	a.86	.00	
20	.00	a.06	.00	a.09	a.02	.00	.00	a.66	.00	a.37	.00	
21	a.00	---	a.26	.00	.00	.00	a.36	.00	.00	.00	.00	
22	a.45	---	a.1.87	a.1.35	.00	.00	a.22	a.04	a.07	.00	.00	
23	.00	---	.00	.00	.00	.00	.00	.00	.00	a.03	.00	
24	a.00	---	.00	.00	.00	.00	.00	.00	.00	a.22	.00	
25	a.09	---	.00	.00	a.44	.00	.00	.00	.00	.00	.00	
26	a.32	---	a.20	.00	.00	.00	a.51	a.04	.00	a.19	.00	
27	a.12	---	a.23	a.04	.00	.00	a.62	.00	.00	a.04	.00	
28	.00	---	a.08	a.00	.00	.00	a.00	a.49	a.17	.00	.00	
29	.00	---	.00	a.32	---	a.07	.00	a.2.08	a.22	.00	a.00	
30	.00	---	a.00	a.75	a.10	---	a.03	.00	.00	a.1.00	.00	
31	.00	---	a.12	---	---	---	a.75	---	---	a.16	---	
TOTAL	2.82	1.02	2.76	4.70	2.58	4.29	2.36	7.06	3.06	6.37	3.64	5.99
MEAN	.09	.05	a.12	a.15	a.09	a.14	a.08	a.23	a.10	a.21	a.12	a.20
MAX	1.07	.30	1.87	1.75	.93	.70	.98	2.08	.72	2.80	1.38	4.78
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.25	.00	---	.00	.58	1.65	.00	---	---	---
2	.00	.43	.13	.00	---	.00	.54	.37	.02	---	---	---
3	.00	.00	3.49	.00	---	.00	.08	.47	2.31	---	---	---
4	.00	.00	.37	.00	---	.00	.00	.00	.00	---	---	---
5	.00	.00	.22	.00	---	.65	.40	.00	.53	---	---	---
6	.92	.00	.00	.00	---	.53	.12	.00	.52	---	---	---
7	.51	.00	.00	.00	---	.03	.09	.27	.00	---	---	---
8	.00	.00	.00	.00	---	.00	.08	.00	.00	---	---	---
9	.76	.00	.00	.00	---	.00	.39	.00	.00	---	---	---
10	.00	.00	.13	.00	---	.00	.06	.00	.00	---	---	---
11	.00	.15	.00	.00	---	.02	.00	.00	.00	---	---	---
12	.00	.65	.00	.00	---	.00	.00	.57	.00	---	---	---
13	.00	.00	b .04	.00	---	.00	1.41	.31	.00	---	---	---
14	.00	.00	.00	.00	---	.00	.42	.52	.00	---	---	---
15	.00	.00	.34	.00	---	.00	.00	.07	.02	---	---	---
16	.00	.00	.00	.00	---	.00	.00	.00	.00	---	---	---
17	.00	.00	.00	.00	---	.08	.00	.00	.00	---	---	---
18	.00	.00	b .00	.00	---	.38	.00	.14	---	---	---	---
19	.00	.06	b .02	.00	---	.00	.00	.17	---	---	---	---
20	.36	.07	.00	---	---	1.11	.00	.00	---	---	---	---
21	.00	.10	.00	---	---	.00	.00	.16	---	---	---	---
22	.00	.00	.15	---	---	.00	.00	.31	---	---	---	---
23	.00	.80	.03	---	---	.00	.00	.00	---	---	---	---
24	.00	.00	1.23	---	---	.00	.00	.00	---	---	---	---
25	.00	.00	1.14	---	---	.00	.00	.02	---	---	---	---
26	.00	.54	.00	---	---	.00	.11	.00	.00	---	---	---
27	.00	.04	.89	---	---	.00	.56	.07	.00	---	---	---
28	.00	.67	.03	---	---	.00	.02	.12	.65	---	---	---
29	.05	.00	.00	---	---	.00	.00	.00	.00	---	---	---
30	.00	.02	.00	---	---	.00	1.77	.00	.00	---	---	---
31	.10	--	.00	---	---	.00	--	.00	--	---	---	---
TOTAL	2.70	3.53	8.46	0.00	0.00	3.49	6.13	5.68	3.40	---	---	---
MEAN	.09	.12	.27	.00	.00	.11	.20	.18	.23	---	---	---
MAX	.92	.80	3.49	.00	.00	1.11	1.77	1.65	2.31	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

391606087155900. HOOKER CREEK UPSTREAM RAIN GAGE (HC-US).

LOCATION.--Lat $39^{\circ}16'06''$, long $87^{\circ}15'59''$, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 10 N., R. 8 W., Sullivan County, Hydrologic Unit 05120111, on north side of State Road 246, 0.7 mile northwest of Lewis, and 3.4 miles southeast of Blackhawk.

PERIOD OF RECORD.--November 1980 to June 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	a.00	.00	a.63	.00	.00	.00	.00	a.01	.00	a.54
2	---	---	a.23	.00	.00	.00	a.04	.00	.00	a.00	.00	a.14
3	---	---	.00	.00	.00	a.83	a.50	.00	.00	a.13	a.12	.00
4	---	---	.00	.00	a.37	.00	a.65	a.65	a.44	a.00	.00	.00
5	---	---	a.02	.00					a.06	a.92	.00	.00
6	---	---	.00	.00	a.01	.00	b.08	.00	.00	.00	.00	.00
7	---	---	.00	.00	.00	.00	a.05	.00	.00	.00	.00	a.11
8	---	---	a.20	.00	.00	.00	a.50	a.50	.00	.00	.00	.00
9	---	---	a.12	.00	.00	a.48	a.39	a.91	a.00	.00	.00	.00
10	---	---	.00	a1.19	.00				a.01	a.58	.00	
11	---	---	.00	.00	.00	a.21	a.08	.00	.00	a.01	.00	
12	---	---	.00	.00	.00	a.12	a.00	a.21	.00	a.01	.00	
13	---	---	.00	.00	.00	.00	a.17	.00	.00	.00	.00	
14	---	---	a.03	a.06	.00	a.03	a.07	a.146	.00	a.00	a.11	a.07
15	---	---					a.05	a.05	a.15	a.83	a.07	
16	---	---	.00	.00	a.43	.00	a.04	.00	.00	a.01	a.26	
17	---	---	a.36	.00	b.02	.00	a.04	.00	.01	.00	a.20	
18	---	---	.00	.00	.00	.00	a.00	a1.09	.00	.00	.00	
19	---	---	.00	.00	a.10	.00	a.50	.00	.00	a.57	.00	
20	---	---	.00	.00	a.14	.00	.00	.00	.00	a.65	.00	
21	---	---	.00	a.03	.00	.00	a.01	a.41	.00	.00	.00	
22	---	---	a.00	.00	a.13	.00	a1.07	.00	a.06	.00	.00	
23	---	---	a.14	.00	a.17	.00	a.02	.00	.00	.00	.00	
24	---	---	a.01	.00	.00	.00	.00	a.78	.00	.00	.00	
25	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	---	---	.00	.00	.00	a.08	.00	a1.01	.00	a.07	a.59	a.03
27	---	---	a.85	.00	.00	a.05	.00	a.99	.00	a.25	a.21	a.20
28	---	---	a.05	.00	.00	a.00	a.55	.00	.00	a.43	a.34	a.01
29	---	---	.00	.00	.00	---	a.31	a.10	a.24	.00	a.39	a.42
30	---	---	.00	.00	.00	---	a.06	a.01	.00	.00	a.09	.00
31	---	---	.00	.00	---	---	.00	---	---	a.10	---	---
TOTAL	---	1.44	0.63	0.17	2.68	1.67	3.85	8.51	3.25	2.77	4.20	2.09
MEAN	---	.08	.02	*.01	*.10	.05	*.13	*.27	*.11	*.09	*.14	*.07
MAX	---	.85	.23	*.14	1.19	.83	1.07	1.46	1.00	.65	.92	.54
MIN	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a c .01	a .00	a .00	a .04	.00	.00	.00	b .06	a .00	.00	a5 .53
2	.00	a c .12	a .01	a .37	a .32	.00	a .34	.00	.00	a .47	.00	a .14
3	.00	a c .01	a .10	a .35	.00	a .22	.00	a .00	a .73	.00	.00	
4	a .09	a c .10	a .04	b .02	.00	a .38	.00	a .07	.00	a .02	.00	
5	a .19	a c .22	.00	.00	.00	a .31	.00	.00	.00	a .65	.00	
6	a .33	c .00	.00	a .11	a .01	.00	.00	.00	a .14	a .88	a .05	
7	.00	c .00	.00	.00	a .00	.00	a .06	a .01	a .92	.00	.00	
8	.00	c .00	.00	.00	a .11	.00	a .10	.00	.00	.00	.00	
9	.00	a c .12	.00	a .01	a .01	.00	a .05	.00	.00	.00	.00	
10	.00	c .00	.00	a .02	.00	a .09	.00	.00	.00	a .41	.00	
11	.00	c .00	.00	.00	a .18	a .33	.00	.00	a .04	.00	a .10	.00
12	.00	.00	.00	.00	a .04	.00	.00	a .04	a .04	.00	a .01	a .00
13	a .00	.00	.00	.00	a .42	.00	.00	.00	.00	.00	a .01	b .19
14	a .04	.00	.00	.00	a .30	.00	.00	.00	.00	.00	a .07	a .07
15	.00	.00	a .01	.00	a .03	.00	.00	a .58	a .01	.00	.00	
16	.00	a .09	.00	a .02	a .82	a .70	a .91	a .14	a .83	.00	a .01	b .01
17	a1 .18	.00	.00	a .00	a .01	a .00	a .22	a .00	.00	.00	a .46	
18	a .18	.00	.00	a .03	a .10	a .62	a .62	a .36	a .00	.00	.00	
19	.00	a .25	.00	a .00	a .01	a .62	a .00	a .02	a .28	a .68	.00	a .00
20	.00	b .06	.00	a .08	.00	a .00	a .16	a .76	a .01	a .09	.00	a .02
21	.00	a .00	a .18	a1 .47	a1 .31	.00	.00	a .51	.00	.00	.00	
22	a .43	.00	a .19	.00	a .03	.00	.00	a .15	a .04	a .01	.00	
23	.00	a .04	.00	a .00	a .27	---	a .45	.00	.00	.00	a .02	
24	a .00	.00	a .00	a .02	.00	---	a .09	.00	.00	.00	a .62	a .08
25	a .10	.00	.00	a .42	a .00	---	a .12	a .02	---	.00	.00	.00
26	a .33	a .23	a .22	b .00	.00	.00	.00	a .53	a .05	.00	a .20	
27	a .14	.00	a .22	b .02	.00	.00	.00	a .50	.00	a .01	a .02	
28	.00	.00	a .04	a .00	.00	.00	.00	a .40	a .14	.00	.00	
29	.00	a .42	a .00	a .27	---	a .00	a .00	a1 .82	a .03	.00	a .06	
30	.00	a .42	a .00	a1 .81	a .02	---	a .09	a .03	.00	.00	a .96	a .00
31	.00	---	a .12	---	---	---	---	a .76	---	.00	a .16	---
TOTAL	3.01	1.86	2.41	4.49	1.61	4.07	2.37	6.73	3.33	4.11	3.19	6.50
MEAN	.10	.06	.08	.14	.06	.13	.08	.22	.11	.16	.10	.22
MAX	1.18	.42	1.47	1.81	.82	.70	.91	1.82	.88	1.92	.96	5.53
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 SUMMATION VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.28	.00	.41	.00	.53	1.55	.00	---	---	---
2	.00	.41	.19	.00	.59	.00	.47	.34	.00	---	---	---
3	.00	.00	3.39	.00	.00	.00	.05	.41	2.21	---	---	---
4	.00	.00	.39	.00	.00	.00	.00	.00	.01	---	---	---
5	.00	.00	.23	.00	.00	.51	.32	.00	.46	---	---	---
6	a .87	.00	.02	.00	.04	.43	.12	.00	.57	---	---	---
7	a .65	.00	.00	.00	.00	.00	.08	.28	.00	---	---	---
8	a .00	.00	.00	.00	.00	.00	.07	.01	.00	---	---	---
9	a .66	.00	.00	.00	.00	.00	.21	.00	.00	---	---	---
10	.00	.00	.11	.00	.00	.00	.05	.00	.00	---	---	---
11	.00	.11	.01	.00	.00	.00	.00	.00	.00	---	---	---
12	.00	.57	.07	.00	.00	.00	.00	.53	.00	---	---	---
13	.00	.00	.00	.00	.00	.00	1.25	.29	.00	---	---	---
14	.00	.00	.00	.00	.00	.00	.35	.37	.00	---	---	---
15	.00	.00	.29	.00	.00	.00	.00	.09	.04	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---
17	.00	.00	.00	.00	.00	.00	.09	.00	.00	---	---	---
18	.00	.00	.00	.00	.00	.00	.36	.00	.13	---	---	---
19	.00	.05	.01	.00	.00	.00	.00	.00	.15	---	---	---
20	.29	.03	.00	.00	.00	1.05	.00	.00	---	---	---	---
21	.00	.11	.00	.18	.00	.01	.00	.14	---	---	---	---
22	.00	.00	.13	.43	.00	.00	.00	.29	---	---	---	---
23	.00	.84	.01	.06	.00	.00	.00	.01	---	---	---	---
24	.00	.00	1.14	.00	.00	.00	.00	.00	---	---	---	---
25	.00	.00	.95	.00	.00	.00	.00	.04	---	---	---	---
26	.00	.51	.00	.00	.00	.12	.00	.00	---	---	---	---
27	.00	.06	.83	.00	.00	.52	.02	.00	---	---	---	---
28	.00	.54	.03	.00	.00	.02	.09	.59	---	---	---	---
29	.04	.02	.00	.24	---	.00	.02	.00	---	---	---	---
30	.00	.01	.00	.00	---	.00	1.29	.01	---	---	---	---
31	.06	---	.00	.00	---	.00	---	.00	---	---	---	---
TOTAL	2.57	3.26	8.08	0.91	1.04	3.11	4.92	5.23	3.29	---	---	---
MEAN	.08	.11	.26	.03	.04	.10	.16	.17	.22	---	---	---
MAX	.87	.84	3.39	.43	.59	1.05	1.29	1.55	2.21	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

392548087143400. UNNAMED TRIBUTARY TO HONEY CREEK RAIN GAGE.

LOCATION.--Lat $39^{\circ}25'48''$ long $87^{\circ}14'34''$, in NE $\frac{1}{4}$ sec. 1, T. 11 N., R. 8 W., Vigo County, Hydrologic Unit 0512111, on Amax Coal Company's Chinook Coal Mine, along access road southwest of mine office, 3.6 miles northwest of Cory, and 1.3 miles south-southwest of North Union Church.

PERIOD OF RECORD.--October 1980 to May 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	b c .09	.00	a .00	.00	a .58	.00	.00	.00	.00	.00	.00	a .66
2	b c .06	.00	a .08	.00	.00	.00	.00	.00	.00	.00	.00	a .54
3	c .00	.00	.00	.00	.00	a .45	.00	.00	a .60	a .26	.00	
4	c .00	.00	a .00	.00	a .59	a .25	.00	a .09	a .64	.00	.00	
5	c .00	.00	a .03	.00	a .42	.00	a .36	.00	a .39	a .74	.00	
6	c .00	.00	.00	.00	.00	a .06	a .07	.00	.00	.00	.00	
7	c .00	.00	b c .00	.00	.00	.00	.00	.00	a .03	.00	a .11	
8	c .00	.00	b c .22	.00	.00	.00	.00	a .03	.00	.00	.00	
9	c .00	.00	b c .13	.00	.00	.00	a .09	a .49	a c .35	.00	.00	
10	c .00	.00	c .00	.00	a .15	.00	a .69	a .17	b c .30	.00	a .09	
11	c .00	.00	.00	.00	.00	a .02	a .05	c .00	.00	.00	.00	
12	c .00	.00	.00	.00	.00	a .74	a .00	c .00	.00	.00	.00	
13	c .00	.00	.00	.00	.00	.00	a .13	c .00	.00	.00	.00	
14	c .00	.00	a .06	.00	.00	.00	a .17	c .00	.00	a .00	a .20	
15	c .00	a .04	.00	.00	a .03	.00	a .40	c .00	a .21	a .18	.00	
16	c .00	.00	.00	a .22	.00	.00	.00	c .00	.00	.00	a .62	
17	b c .21	a .32	.00	.00	.00	.00	a .12	c .00	.00	.00	a .13	
18	c .00	.00	.00	.00	.00	.00	a .00	a .57	c .00	.00	.00	
19	c .00	.00	.00	.00	a .02	.00	a .40	.00	c .00	a .05	.00	
20	c .00	.00	.00	a .08	.00	.00	.00	c .00	a .56	.00	.00	
21	c .00	.00	.00	.00	a .12	.00	a .00	b c .89	.00	.00	.00	
22	c .00	.00	a .14	.00	a .16	.00	a .02	b c .05	c .06	.00	.00	
23	c .00	a .14	.00	.00	.00	.00	a .00	c .00	c .00	.00	.00	
24	b c .71	.00	.00	.00	.00	.00	a .74	c .00	.00	.00	.00	
25	c .00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	c .00	.00	.00	.00	a .02	.00	a .21	.00	a .08	a .20	.00	
27	b c .54	a .87	.00	.00	a .13	.00	a .87	.00	a .54	a .18	a .09	
28	.00	a .05	.00	a .03	.00	a .69	.00	a .20	a .08	a .00		
29	.00	.00	a .03	.00	---	a .14	a .35	.00	.00	a .16	a .61	
30	.00	.00	.00	.00	---	a .06	a .71	.00	.00	.00	.00	
31	.00	---	.00	---	.00	---	---	---	.00	a .25	---	
TOTAL	2.61	1.42	0.55	0.08	2.28	1.33	5.58	9.31	2.69	4.30	4.14	2.96
MEAN	.08	.05	.02	.00	.08	.04	.19	.30	.09	.14	.13	.10
MAX	1.21	.87	.22	.08	1.15	.59	1.73	1.87	1.35	1.54	1.74	.66
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	a.00	a.12	a.00	a.00	a.00	a.00	a.00	a.00	a.21
2	.00	a.12	a.00	a.35	a.00	a.03	a.29	a.00	a.00	a.38	a.00	a.05
3	.00	.00	a.09	a.48	a.00	a.00	a.40	a.00	a.00	a.1.30	a.00	.00
4	.00	.00	a.03	a.04	a.00	a.56	a.00	b.01	a.04	a.00	a.08	.00
5	a.44	a.13	.00	.00	.00	a.41	a.41	.00	.00	a.00	a.39	.00
6	a.11	.00	.00	a.03	.00	.00	.00	a.07	a.00	a.00	a.00	.00
7	.00	.00	.00	a.00	.00	.00	a.00	a.88	a.1.36	a.00	a.00	.00
8	.00	a.08	.00	.00	.00	.00	a.11	a.08	a.03	a.00	a.00	.00
9	.00	a.08	.00	a.04	.00	a.00	b.04	a.07	a.00	a.00	a.00	.00
10	.00	.00	a.04	.00	a.10	a.03	.00	.00	a.76	a.00	a.00	.00
11	.00	.00	.00	a.19	a.55	.00	.00	.00	a.00	a.00	a.05	.00
12	.00	.00	.00	a.00	a.00	.00	a.00	a.00	a.02	a.00	a.00	.00
13	a.00	.00	.00	a.00	a.00	a.38	a.00	a.00	a.00	a.00	a.00	a.15
14	a.05	.00	.00	a.00	a.00	a.00	a.18	a.00	a.00	a.00	a.00	.00
15	.00	.00	.00	a.02	.00	.00	a.00	a.00	a.31	a.00	a.00	.00
16	a.00	.00	a.03	a.75	a.39	a.71	a.00	a.99	a.00	a.00	a.00	.00
17	a.63	.00	b.03	a.07	a.00	a.23	a.00	a.00	a.00	a.00	a.00	a.40
18	a.02	.00	b.01	a.07	a.04	a.04	a.00	a.53	a.00	a.14	a.00	.00
19	.00	a.11	b.02	a.02	a.00	a.52	a.00	a.11	a.07	a.1.63	a.00	.00
20	.00	a.04	a.00	a.11	.00	a.12	a.12	a.15	a.56	a.00	a.00	.00
21	.00	.00	a.08	a.00	.00	.00	.00	a.08	a.00	a.00	a.00	.00
22	a.48	a.00	a.1.39	a.05	a.00	.00	.00	a.04	a.10	a.68	a.00	.00
23	.00	a.17	.00	a.02	.00	.00	.00	.00	.00	a.00	a.00	.00
24	.00	b.02	.00	.00	.00	.00	.00	.00	.00	a.00	a.14	a.19
25	a.16	.00	.00	.00	a.48	.00	.00	.00	.00	.00	.00	.00
26	a.32	a.16	a.44	a.00	.00	.00	.00	a.26	a.00	a.00	a.31	.00
27	a.21	.00	a.26	a.00	.00	.00	a.62	a.00	a.00	a.03	a.00	.00
28	.00	.00	a.06	a.00	.00	.00	.00	a.31	a.00	a.00	a.00	.00
29	.00	.00	a.23	---	---	---	---	a.1.26	a.16	a.00	a.00	.00
30	.00	a.38	a.00	a.61	---	---	b.06	a.00	a.00	a.76	a.00	.00
31	.00	---	a.09	.00	---	---	---	a.97	---	a.13	---	---
TOTAL	2.42	1.21	2.44	4.05	1.22	3.29	2.34	5.13	3.95	4.89	2.89	3.00
MEAN	.08	.04	.08	a.13	a.04	a.11	a.08	a.17	a.13	a.16	a.09	a.10
MAX	.63	.38	1.39	1.61	.75	.56	.71	1.26	1.36	1.63	1.14	2.21
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.23	.00	.38	.00	.51	1.29	---	---	---	---
2	.00	.49	.29	.00	.69	.00	.31	.06	---	---	---	---
3	.00	.00	3.15	.00	.00	.00	.10	.31	---	---	---	---
4	.10	.00	.35	.00	.00	.00	.05	.00	---	---	---	---
5	.00	.00	.27	.00	.00	.34	.04	.00	---	---	---	---
6	.82	.00	.00	.00	.03	.37	.04	.00	---	---	---	---
7	.36	.00	.00	.00	.00	.17	.03	.22	---	---	---	---
8	.00	.00	.00	.00	.00	.00	.02	.00	---	---	---	---
9	.42	.00	.00	.00	.00	.00	.02	.00	---	---	---	---
10	.00	.00	.15	.00	.00	.00	.02	.00	---	---	---	---
11	.00	.10	.00	.00	.00	.00	.02	.00	---	---	---	---
12	.00	.76	.10	.00	.00	.00	.02	.27	---	---	---	---
13	.00	.00	.00	.00	.00	.00	.06	.11	---	---	---	---
14	.00	.00	.00	.00	.00	.00	.06	.54	---	---	---	---
15	.00	.00	.23	.00	.00	.00	.00	.15	---	---	---	---
16	.00	.00	.00	.00	.00	.00	.03	.00	---	---	---	---
17	.00	.00	.00	.00	.00	.08	.00	.00	---	---	---	---
18	.00	.00	.00	.00	.00	.40	.00	---	---	---	---	---
19	.05	.00	.02	.00	.00	.00	.00	.00	---	---	---	---
20	.30	.10	.00	.00	.00	1.00	.00	---	---	---	---	---
21	.00	.19	.00	.15	.00	.00	.00	.00	---	---	---	---
22	.00	.00	.00	.37	.00	.00	.00	.00	---	---	---	---
23	.00	.90	.09	.07	.00	.00	.00	.00	---	---	---	---
24	.00	.00	1.04	.00	.00	.00	.00	.00	---	---	---	---
25	.00	.00	1.21	.00	.00	.00	.00	.00	---	---	---	---
26	.00	.45	.00	.00	.00	.09	.00	.00	---	---	---	---
27	.00	.03	.76	.00	.00	1.01	.00	.00	---	---	---	---
28	.00	.50	.00	.00	.00	.02	.14	.00	---	---	---	---
29	.00	.04	.00	.24	---	.00	.00	.51	---	---	---	---
30	.00	.00	.00	.00	---	.00	.00	---	---	---	---	---
31	.06	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	2.11	3.56	7.89	0.83	1.10	3.48	1.98	2.95	---	---	---	---
MEAN	.07	.12	.25	.03	.04	.11	.07	.17	---	---	---	---
MAX	.82	.90	3.15	.37	.69	1.01	.51	1.29	---	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

390955087171800. UNNAMED TRIBUTARY TO SULPHUR CREEK RAIN GAGE.

LOCATION.--Lat $39^{\circ}09'55''$, long $87^{\circ}17'18''$, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T. 8 N., R. 8 W., Sullivan County, Hydrologic Unit 0150211, 1.6 miles southeast of Hymera and 2.0 miles north-northeast of Greenville.

PERIOD OF RECORD.--October 1980 to June 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.03	.00	.00	.00	a.68	.00	.00	.00	.00	.00	.00	a.34
2	a.11	.00	a.08	.00	.00	.00	.00	.00	.00	.00	.00	a.13
3	.00	.00	.00	.00	.00	.00	a.51	.00	.00	.00	a.22	.00
4	.00	.00	.00	.00	.00	a.27	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	a.30	.00	a.15	a.23	.00	a.1.34	.00	.00
6	.00	.00	a.03	.00	.00	.00	.00	a.09	.00	.00	.00	.00
7	.00	.00	a.00	.00	.00	.00	a.02	a.08	.00	.00	.00	a.14
8	.00	.00	a.30	.00	.00	.00	a.12	a.10	a.84	.00	.00	.00
9	.00	.00	a.13	.00	.00	.00	a.47	a.52	a.55	.00	a.23	.00
10	.00	.00	.00	a.30	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	a.44	a.31	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	a.90	a.56	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	a.10	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	a.93	.00	.00	a.00	a.21	.00
15	.00	.00	.00	.00	.00	a.05	.00	.00	.00	a.60	a.76	a.17
16	.00	.00	.00	a.46	.00	.00	.00	.00	.00	.00	.00	a.48
17	a.1.35	a.50	.00	a.02	.00	a.11	.00	.00	.00	.00	.00	a.12
18	a.02	.00	.00	.00	.00	a.1.32	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	a.08	.00	a.02	.00	a.04	.00	.00	.00	.00
20	.00	.00	a.12	.00	.00	.00	.00	a.1.05	.00	.00	.00	.00
21	.00	.00	a.09	.00	.00	.00	.00	a.45	.00	.00	.00	.00
22	.00	.00	a.17	.00	.00	.00	a.05	.00	.00	.00	a.02	.00
23	a.00	a.18	.00	a.17	.00	.00	a.1.10	.00	.00	.00	.00	.00
24	a.81	a.02	.00	.00	.00	a.02	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	a.17	a.29	a.88	.00	.00	.00	a.1.12	a.02
27	a.44	a.94	.00	.00	a.03	a.00	a.1.38	.00	a.09	a.09	a.39	a.11
28	a.05	a.06	.00	.00	a.02	a.00	a.36	.00	a.11	a.11	a.48	a.00
29	.00	.00	.00	.00	---	a.49	a.29	.00	.00	.00	a.73	a.60
30	.00	---	.00	.00	---	.00	a.15	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	---	.00	.00	---	---
TOTAL	2.81	1.70	0.54	0.21	2.90	1.55	3.44	7.62	2.12	1.89	4.27	2.34
MEAN	.09	.06	.02	.01	.10	.05	.11	.25	.07	.06	.14	.08
MAX	1.35	.94	.30	.12	1.30	.51	.90	1.38	.84	1.05	1.34	.60
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a.04	.00	a.00	.00	a.35	.00	a.23	a.23	.00	.00	a.22
2	.00	a.13	.00	a.41	.00	a.34	.00	a.23	.00	a.55	.00	a.20
3	.00	.00	.00	a.34	.00	a.04	a.09	a.35	.00	a.55	.00	.00
4	.00	a.08	.00	a.04	.00	a.42	.00	a.00	a.05	.00	.00	.00
5	a.30	a.24	.00	.00	.00	a.42	a.28	.00	.00	a.10	.00	.00
6	a.11	.00	.00	a.11	.00	.00	.00	a.20	a.00	.00	.00	.00
7	.00	a.00	.00	.00	a.21	.00	a.11	a.11	a.53	a.03	.00	.00
8	.00	a.04	.00	.00	.00	a.00	a.07	a.05	a.32	a.90	.00	.00
9	.00	a.21	.00	.00	.00	a.04	.00	a.11	.00	.00	.00	.00
10	.00	.00	.00	a.04	.00	a.04	.00	a.07	a.05	a.52	a.39	.00
11	.00	.00	.00	.00	a.21	a.31	.00	.00	a.00	.00	a.27	.00
12	.00	.00	.00	.00	.00	a.05	.00	a.02	.00	.00	a.02	.00
13	.00	.00	.00	.00	.00	a.37	.00	.00	.00	.00	a.26	.00
14	.00	.00	.00	.00	.00	a.36	.00	.00	.00	.00	a.12	.00
15	.00	.00	.00	.00	.00	a.09	.00	.00	a.73	.00	.00	.00
16	.00	a.51	.00	a.02	a.08	a.58	a.89	a.06	a.47	.00	.00	.00
17	a.55	.00	.00	a.00	a.03	a.11	a.91	a.20	.00	.00	a.45	.00
18	b.04	.00	.00	a.05	a.11	a.00	.00	a.22	.00	a.18	.00	.00
19	.00	.00	.00	.00	.00	a.87	.00	a.28	a.13	a.58	.00	.00
20	.00	.00	.00	a.11	.00	.00	a.16	a.18	.00	a.04	.00	.00
21	.00	.00	a.39	.00	.00	.00	.00	a.49	.00	a.24	.00	.00
22	a.45	.00	a1.64	a1.55	.00	.00	.00	a.52	a.04	a.50	.00	.00
23	.00	.00	.00	a.04	.00	.00	.00	.00	.00	a.03	.00	.00
24	.00	.00	.00	a.00	.00	a.04	.00	.00	.00	.00	a.21	.00
25	a.05	.00	.00	a.04	.00	a.36	.00	.00	.00	.00	.00	.00
26	a.38	.00	a.19	b.06	.00	.00	.00	a.36	.00	.00	a.21	.00
27	a.10	.00	a.27	.00	.00	a.05	.00	a.25	.00	a.04	.00	.00
28	.00	.00	.00	a.28	---	.00	.00	a.60	a.48	a.13	.00	.00
29	.00	.00	.00	a1.86	---	a.16	.00	a.17	a.32	.00	a.00	.00
30	.00	.00	a.16	a.56	---	.00	---	a.37	---	.00	a.128	.00
31	.00	---	---	---	---	---	---	---	---	---	a.18	---
TOTAL	1.98	1.25	2.70	5.51	2.08	4.55	2.38	6.19	3.32	4.22	2.50	5.48
MEAN	.06	.04	.09	*.18	.07	.15	.08	.20	.11	.14	.08	.18
MAX	.55	.51	1.64	1.86	1.08	.91	.89	1.25	.73	.90	1.28	4.22
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.16	.00	.47	.00	.52	1.52	.00	---	---	---
2	.00	.49	.00	.00	.57	.00	.65	.63	.05	---	---	---
3	.00	.00	3.63	.00	.00	.00	.06	.44	1.72	---	---	---
4	.00	.00	.42	.00	.00	.00	.00	.00	.00	---	---	---
5	.00	.00	.20	.00	.00	.67	.31	.00	.18	---	---	---
6	a.97	.00	.00	.00	.05	.50	.18	.00	.24	---	---	---
7	a1.16	.00	.00	.00	.00	.00	.06	.19	.01	---	---	---
8	a1.57	.00	.00	.00	.00	.00	.10	.02	.01	---	---	---
9	.00	.00	.13	.00	.00	.00	.23	.00	.00	---	---	---
10	.00	.00	.00	.00	.00	.00	.06	.00	.00	---	---	---
11	.00	.25	.00	.00	.00	.00	.00	.00	.00	---	---	---
12	.00	.62	.00	.00	.00	.00	.00	.00	.51	.00	---	---
13	.00	.00	.00	.00	.00	.00	.00	1.24	.37	.00	---	---
14	.00	.00	.00	.00	.00	.00	.00	.38	.65	.00	---	---
15	.00	.00	.29	.00	.00	.00	.00	.00	.04	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---
17	.00	.00	.00	.00	.00	.00	.11	.00	.00	---	---	---
18	.00	.00	.00	.00	.00	.00	.34	.00	.27	---	---	---
19	.00	.02	.02	.02	.00	.00	.00	.00	.14	---	---	---
20	.36	.05	.00	.00	.00	1.03	.00	.00	---	---	---	---
21	.00	.13	.00	.29	.00	.00	.00	.00	.20	---	---	---
22	.00	.00	.02	.37	.00	.00	.00	.00	.16	---	---	---
23	.00	.60	.04	.09	.00	.00	.00	.00	.00	---	---	---
24	.00	.00	1.61	.00	.00	.00	.00	.00	.00	---	---	---
25	.00	.00	1.65	.00	.00	.00	.00	.00	.00	---	---	---
26	.00	.57	.00	.00	.00	.00	.14	.00	.00	---	---	---
27	.00	.10	1.03	.00	.00	.00	.56	.00	.00	---	---	---
28	.00	.61	.09	.00	.00	.00	.19	.86	.86	---	---	---
29	.02	.00	.00	.32	---	.00	.00	.00	.00	---	---	---
30	.00	.00	.00	.00	---	.00	.93	.00	.00	---	---	---
31	.12	---	.00	.00	---	.00	---	.00	.00	---	---	---
TOTAL	4.20	3.44	9.29	1.07	1.09	3.35	4.91	6.00	2.21	---	---	---
MEAN	•14	•11	•30	•03	•04	•11	•16	•19	•16	---	---	---
MAX	1.57	.62	3.63	.37	.57	1.03	1.24	1.52	1.72	---	---	---
MIN	•00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

391335087031800. POND CREEK RAIN GAGE.

LOCATION.--Lat 39°13'35", Long 87°03'18", in NE_{1/4}NW_{1/4} sec. 15, T. 9 N., R. 6 W., Clay County, Hydrologic Unit 05120203, 0.8 mile west-southwest of Coal City and 1.4 miles northwest of Daggett.

PERIOD OF RECORD.--October 1980 to May 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a.07	.00	c.00	.00	a.64	.00	.00	.00	c.00	a.02	.00	a.56
2	a.16	.00	c.00	.00	.00	.00	.00	.00	c.00	.00	.00	a.10
3	.00	.00	c.00	.00	.00	.00	.00	.00	c.00	a.18	.07	.00
4	.00	.00	c.00	.00	a.78	a.38	.00	a c.06	a c.50	.00	.00	.00
5	.00	.00	c.00	.00	a.28	.00	a.62	a c.12	a c.12	a.04	a.99	.00
6	.00	.00	c.00	.00	.00	.00	a.12	c.00	.00	c.00	.00	a.00
7	.00	.00	c.00	.00	.00	.00	.00	c.00	.00	c.00	c.00	a.11
8	.00	.00	a c.29	.00	.00	.00	.00	c.00	.00	c.00	c.00	.00
9	.00	.00	a c.13	.00	.00	a.30	a.45	a c.1.17	a.03	c.00	c.00	.00
10	.00	.00	c.00	.00	a 1.47	.00	a c.76	a 2.07	a c.64	.00	a c.66	.00
11	.00	.00	c.00	.00	.00	a c.70	a.33	c.00	.00	c.00	.00	.00
12	.00	.00	c.00	.00	.00	a c.16	a c.12	.00	c.00	c.00	.00	.00
13	.00	.00	c.00	.00	a.02	.00	a.02	a.11	c.00	.00	.00	a.46
14	.00	.00	c.00	.00	.00	.00	a 1.26	c.00	.00	.00	.00	a.02
15	.00	a.04	a.07	.00	.00	a.08	.00	a.05	c.00	a.85	a 1.00	.00
16	.00	a 1.32	a.52	.00	.00	a.57	.00	.00	c.00	.00	.00	a.51
17	.00	.00	.00	.00	.00	.00	a.12	.00	.00	.00	.00	a.10
18	.00	.00	.00	.00	.00	a.04	a 1.37	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	a.19	.00	a.43	.00	.00	a.03	.00	.00
20	.00	.00	.00	a.16	.00	.00	.00	.00	a.56	.00	.00	.00
21	.00	.00	.00	a.07	.00	.00	a.04	.00	a 1.01	.00	.00	.00
22	.00	.00	.00	a.10	.00	a.95	.00	a.03	.00	.00	.00	.00
23	a.00	a c.15	.00	.00	a.21	.00	.00	.00	.00	.00	.00	.00
24	a.75	a c.07	.00	.00	.00	.00	.00	a.62	.00	.00	.00	.00
25	.00	c.00	.00	.00	.00	.00	.00	c.00	.00	.00	.00	.00
26	.00	c.00	.00	.00	.00	a.45	.00	a c 2.10	.00	a.10	a.51	.00
27	a.51	a c 1.02	.00	.00	.00	a.08	.00	a c 1.28	.00	a.10	a.44	a.12
28	a.06	a c.04	.00	.00	.00	a.50	c.00	.00	a.11	a.39	.00	a.62
29	.00	a c.02	a.02	.00	---	a.53	a.20	a c.35	.00	a.49	.00	a.05
30	.00	c.00	.00	.00	---	.00	a.05	c.00	.00	a.00	.00	---
31	.00	---	.00	.00	---	.00	---	c.00	---	.00	a.05	---
TOTAL	2.87	1.86	0.51	0.23	3.20	2.20	4.65	10.73	3.15	2.52	4.60	2.60
MEAN	.09	.06	.02	.01	.11	.07	.16	.35	.11	.08	.15	.09
MAX	1.32	1.02	.29	.16	1.47	.78	.95	2.10	1.17	.85	1.00	.62
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	a3.80
2	.00	a.04	.00	a.43	a.49	a.03	a.24	.00	.00	a.36	.00	a.15
3	.00	.00	a.10	a.39	.00	a.41	.00	.00	a.71	.00	.00	.00
4	.00	.00	a.04	a.04	a.23	a.39	.00	.00	a.06	a.09	a.12	.00
5	a.30	a.10	.00	.00	.00	a.27	.00	.00	.00	a1.41	.00	.00
6	a.32	.00	.00	a.10	a.07	.00	.00	a.05	.00	a.73	.00	.00
7	.00	.00	.00	.00	a.09	.00	a.13	a.51	.00	.00	.00	.00
8	.00	a.02	.00	.00	a.02	.00	a.18	a.07	a3.27	.00	.00	.00
9	.00	a.15	.00	.00	a.02	.00	a.10	.00	.00	a.00	.00	.00
10	.00	.00	.00	.00	a.10	a.07	a.10	.00	.00	a.57	a.37	.00
11	.00	.00	.00	.00	a.29	a.45	.00	.00	.00	a.19	.00	.00
12	.00	.00	.00	.00	a.10	.00	a.10	a.05	.00	.00	.00	.00
13	.00	.00	.00	.00	a.46	.00	.00	.00	.00	.00	a.15	.00
14	a.06	.00	.00	.00	a.36	.00	.00	.00	.00	.00	a.10	.00
15	.00	.00	.00	.00	a.12	.00	.00	a.50	.00	.00	.00	.00
16	.00	a.31	.00	.00	a.85	a.66	a1.13	.00	a.63	.00	.00	.00
17	a.93	.00	.00	c.00	a.11	.00	a.27	.00	.00	.00	.00	a.45
18	a.11	.00	.00	c.00	a.06	a.32	.00	a.56	a.00	a.03	.00	.00
19	.00	a.35	.00	c.00	a.02	a.56	.00	.00	a.05	a.44	.00	.00
20	.00	a.07	.00	a c.10	a.02	.00	a.16	a.10	.00	a.02	a.07	.00
21	.00	a.40	.00	a.30	c.00	.00	.00	a.41	.00	.00	.00	.00
22	a.40	a.00	a.79	a c1.43	.00	.00	a.05	a.05	a.02	.00	.00	.00
23	.00	a.21	.00	a c.04	.00	.00	.00	.00	.00	a.02	.00	.00
24	.00	.00	.00	c.00	.00	.00	.00	.00	.00	a.39	a.69	.00
25	a.04	.00	.00	c.00	.00	a.44	.00	.00	.00	.00	.00	.00
26	a.31	a.46	a.12	c.00	.00	.00	.00	a.74	a.04	.00	a.16	.00
27	a.10	.00	a.28	.00	.00	.00	.00	a.63	a.04	a.04	a.04	.00
28	.00	.00	a.08	.00	.00	.00	.00	a2.07	a.02	.00	.00	.00
29	.00	a.49	.00	a.23	---	---	a.00	a1.68	a.20	.00	a.00	.00
30	.00	a.49	.00	a1.87	---	a.29	.00	a.03	.00	a1.42	.00	.00
31	.00	---	a.09	a.81	---	.00	---	a.84	---	.00	a.13	---
TOTAL	2.57	2.20	2.80	5.44	2.35	4.25	2.86	6.42	4.35	6.26	4.32	5.34
MEAN	.08	.07	.09	.18	.08	.14	.10	.21	.15	.20	.14	.18
MAX	.93	.49	1.79	1.87	.85	.66	1.13	1.68	2.07	3.27	1.42	3.80
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	a.25	.00	.55	.00	.52	1.35	—	—	—	—
2	.00	a.48	a.03	.00	.92	.00	.64	.82	—	—	—	—
3	.00	.00	a3.19	.00	.00	.00	.11	.43	—	—	—	—
4	.00	.00	a.54	.00	.00	.00	.00	.00	—	—	—	—
5	.00	.00	a.25	.00	.00	.55	.34	.00	—	—	—	—
6	a.59	.00	.00	.00	.08	.42	.23	.00	—	—	—	—
7	a.60	.00	.00	.00	.00	.10	.07	.61	—	—	—	—
8	.00	.00	.00	.00	.00	.00	.13	.02	—	—	—	—
9	a.94	.00	a.00	.00	.00	.00	.04	.00	—	—	—	—
10	.00	.00	a.12	.00	.00	.05	.08	.00	—	—	—	—
11	.00	a.12	.00	.00	.00	.03	.00	.00	—	—	—	—
12	.00	a.64	a.04	.00	.00	.00	.00	.77	—	—	—	—
13	.00	.00	.00	.00	.00	.00	.00	1.42	.26	—	—	—
14	.00	.00	.00	.00	.00	.00	.30	.42	—	—	—	—
15	.00	.00	a.39	.00	.00	.00	.00	.00	.05	—	—	—
16	.00	.00	.00	.00	.00	.00	.00	.00	—	—	—	—
17	.00	.00	.00	.00	.00	.12	.00	—	—	—	—	—
18	.00	.00	a.03	.00	.00	.43	.00	—	—	—	—	—
19	.00	a.27	a.14	.00	.00	.00	.00	—	—	—	—	—
20	—	—	—	—	—	1.04	.00	—	—	—	—	—
21	.00	a.16	.00	.28	.00	.00	.00	—	—	—	—	—
22	.00	.00	a.80	.05	.29	.00	.00	—	—	—	—	—
23	.00	.00	a.80	.03	.10	.00	.00	—	—	—	—	—
24	.00	.00	.00	1.14	.00	.00	.00	—	—	—	—	—
25	.00	.00	.00	1.90	.00	.00	.00	—	—	—	—	—
26	.00	a.51	.00	.00	.00	.06	.00	—	—	—	—	—
27	.00	a.07	.34	.00	.00	.55	.00	—	—	—	—	—
28	.00	a.64	.90	.00	.00	.00	.14	—	—	—	—	—
29	.00	.00	.00	.31	—	.00	.00	—	—	—	—	—
30	a.00	.00	.00	.00	—	.00	1.30	—	—	—	—	—
31	a.11	—	.00	.00	—	.00	—	—	—	—	—	—
TOTAL	2.51	3.59	9.23	0.98	1.55	3.35	5.32	4.73	—	—	—	—
MEAN	.08	.12	.30	.03	.06	.11	.18	.30	—	—	—	—
MAX	.94	.80	3.19	.31	.92	1.04	1.42	1.35	—	—	—	—
MIN	.00	.00	.00	.00	.00	.00	.00	.00	—	—	—	—

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

390833087164100. UNNAMED TRIBUTARY TO BIG BRANCH RAIN GAGE.

LOCATION.--Lat 39°08'33", long 87°16'41", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 8 N., R. 8 W., Sullivan County, Hydrologic Unit 0150211, 50.0 feet east of County Road 700 East, 0.4 mile north of County Road 350 North, 3.5 miles southeast of Hymera, and 1.3 miles east of Greenville.

PERIOD OF RECORD.--October 1980 to June 1983.

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	a .00	.00	c .00	.00	a .60	.00	.00	.00	c .00	.00	.00	a .64
2	a .15	.00	c .00	.00	.00	.00	.00	.00	c .00	.00	.00	a .22
3	.00	c .00	c .00	.00	.00	.00	.00	.00	c .00	.00	a .16	.00
4	.00	c .00	c .00	.00	.00	a .92	a .30	.00	c .00	a .15	.00	.00
5	.00	c .00	c .00	.00	.00	a .26	.00	a .64	a c .37	a .62	a 1.43	.00
6	.00	c .00	a .04	.00	.00	.00	.00	a .20	c .00	.00	.00	.00
7	.00	c .00	c .00	.00	-	.00	.00	.00	c .00	.00	.00	a .15
8	.00	c .00	a .33	.00	.00	.00	.00	.00	c .00	.00	.00	.00
9	.00	c .00	a .15	.00	.00	.00	a .16	a .33	a c 1.34	.00	.00	.00
10	.00	c .00	.00	.00	a 1.10	.00	a .52	a 1.55	a c .88	.00	a .18	.00
11	.00	c .00	c .00	.00	.00	.00	a .55	.00	c .00	.00	.00	.00
12	.00	c .00	c .00	.00	.00	.00	a .51	.00	c .00	.00	.00	.00
13	c .00	c .00	c .00	.00	.00	.00	.00	a .13	c .00	.00	.00	.00
14	c .00	c .00	c .00	.00	a .02	.00	a .00	a 1.51	c .00	a .00	a .07	a .07
15	c .00	c .00	c .00	.00	a .02	.00	a .06	.00	a .02	a .00	a .38	a .78
16	c .00	c .00	c .00	.00	a .46	.00	a .03	.00	c .00	.00	.00	a .47
17	a c 1.53	a c .48	c .00	.00	a .02	.00	a .20	.00	a .00	.00	.00	a .12
18	a c .02	c .00	c .00	.00	.00	.00	a .00	a 1.21	*00	*00	*00	.00
19	c .00	c .00	c .00	.00	a .11	.00	a .56	.00	a .00	a .03	.00	.00
20	c .00	c .00	c .00	a .00	a .14	.00	.00	.00	a .90	.00	.00	.00
21	c .00	c .00	c .00	a .07	.00	.00	a .49	.00	a .38	.00	.00	.00
22	c .00	c .00	c .00	.00	a .13	.00	a .00	a .03	*00	*00	*00	c .00
23	c .00	a c .18	c .00	.00	a .18	.00	.00	a .43	*00	*00	*00	c .00
24	a c .91	a c .02	c .00	.00	.00	.00	.00	c .00	.00	.00	.00	c .00
25	c .00	c .00	c .00	.00	.00	.00	.00	.00	.00	.00	.00	c .00
26	c .00	c .00	c .00	.00	.00	.00	a .08	.00	a c 1.41	.00	a .12	a .46
27	a .09	a c .89	c .00	.00	.00	.00	.00	a c 2.21	*00	a .06	a .50	c .00
28	a .03	a c .06	c .00	.00	.00	.00	a .50	c .00	*00	a .07	a .69	c .00
29	.00	c .00	c .00	.00	---	a .50	a .21	c .00	*00	*00	a .40	a c .27
30	.00	c .00	c .00	.00	.00	---	a .15	c .00	*00	*00	c .00	c .00
31	.00	---	.00	.00	---	---	---	c .00	---	---	a .04	---
TOTAL	2.73	1.63	0.52	0.23	2.60	1.82	4.18	9.64	3.00	2.68	4.64	2.12
MEAN	.09	.05	.02	.01	.09	.06	.14	.31	.10	.09	.15	.07
MAX	1.53	.89	.33	.14	1.10	.92	.56	2.21	1.34	.90	1.43	.64
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	c.00	a.04	.00	.00	a.40	.00	.00	.00	.00	a.49	.00	a3.61
2	c.00	a.12	.00	a.09	a.32	.00	a.19	.00	.00	a.44	.00	a.23
3	c.00	.00	a.04	a.03	a.10	a.34	a.21	.00	.00	a.07	.00	.00
4	c.00	.00	a.19	.00	.00	a.03	a.24	.00	.00	a.00	.00	.00
5	a c.14									a.39		
6	a c.06	.00	.00	a.11	a.03	.00	.00	a.09	.00	.00	.00	.00
7	c.00	a.00	.00	.00	a.20	.00	a.13	a.25	a.59	.00	.00	.00
8	c.00	a.04	.00	a.03	a.02	a.03	a.06	a.06	.00	a.10	.00	.00
9	c.00	a.23	.00	a.05	a.08	a.03	a.03	a.03	.00	.00	a.00	.00
10	c.00	.00	.00	.00	a.05	.00	a.08	a.03	.00	.00	a.36	.00
11	c.00	.00	.00	.00	a.23	a.29	.00	.00	.00	a.02	.00	a.34
12	c.00	.00	.00	.00	a.05	a.05	.00	.00	.00	.00	.00	.00
13	c.00	.00	.00	.00	a.50	a.50	.00	.00	.00	.00	.00	a.18
14	c.00	.00	.00	.00	a.26	a.26	.00	.00	.00	.00	.00	a.14
15	c.00	.00	.00	.00	a.07	a.07	.00	a.47	.00	.00	.00	.00
16	c.00	a.28	.00	a.05	a.49	a.92	.00	a.39	.00	.00	.00	.00
17	a c.25	.00	.00	a.00	a.07	a.08	a.23	a.00	.00	a.02	.00	a.39
18	c.00	.00	.00	a.07	a.08	a.60	a.65	a.00	.00	a.00	.00	.00
19	c.00	a.59	.00	a.00	a.02	a.71	a.00	a.07	a.73	.00	.00	.00
20	c.00	a.08	.00	a.11	.00	a.19	a.47	a.15	.00	.00	.00	.00
21	c.00	.00	a.31	.00	.00	.00	.00	a.56	.00	.00	.00	.00
22	a.43	a.00	a.74	a.21	a.00	a.00	a.41	a.06	a.41	a.00	a.00	.00
23	.00	a.19	.00	a.03	a.00	a.00	a.00	a.00	a.00	a.03	a.00	a.00
24	.00	a.03	.00	a.00	a.03	a.00	a.00	a.00	a.00	a.00	a.00	a.33
25	a.04	.00	.00	a.03	.00	a.41	.00	.00	.00	.00	.00	.00
26	a.39	a.52	a.17	.00	.00	.00	.00	a.57	.00	.00	a.18	.00
27	a.10	.00	a.26	.00	a.04	.00	a.00	a.05	a.00	a.00	a.07	.00
28	.00	.00	a.04	.00	a.22	---	a.00	a.00	a.54	.00	.00	.00
29	.00	a.00	a.00	a.82	a.82	---	a.27	.00	a.20	.00	a.00	a.00
30	.00	a.37	a.00	a.14	a.71	---	a.71	---	a.04	a.00	a.07	.00
31	.00	---						a.61	---	.00	a.18	---
TOTAL	1.41	2.68	2.79	5.19	2.04	4.07	2.20	7.14	2.66	2.07	2.62	4.88
MEAN	.05	.09	.09	.17	.07	.13	.07	.23	.09	.07	.08	.16
MAX	.43	.59	1.74	1.82	.96	.71	.92	1.44	.59	.73	1.07	3.61
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Table 8.--Precipitation at selected sites, coal-mining region, west-central Indiana--Continued

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	a.00	a.12	.00	.37	.00	.45	1.68	.00	---	---	---
2	.00	a.52	.00	.00	.52	.00	.59	.77	.05	---	---	---
3	.00	a.00	a.44	.00	.00	.00	.08	.45	1.25	---	---	---
4	.00	a.00	a.39	.00	.00	.00	.00	.00	.02	---	---	---
5	.00	a.00	a.17	.00	.00	.60	.33	.00	.11	---	---	---
6	.73	.00	a.02	.00	.08	.50	.21	.00	.29	---	---	---
7	1.03	.00	.00	.00	.00	.02	.07	.42	.01	---	---	---
8	.00	.00	.00	.00	.00	.00	.14	.03	.00	---	---	---
9	1.60	.00	.00	.00	.00	.00	.25	.00	.00	---	---	---
10	.00	.00	a.15	.00	.00	.00	.10	.00	.01	---	---	---
11	.00	a.16	.00	.00	.04	.00	.04	.00	.00	---	---	---
12	.00	a.68	.00	.04	.00	.00	.00	.48	.00	---	---	---
13	.00	.00	.00	.00	.00	.00	.00	1.08	.27	---	---	---
14	.00	.00	.00	.00	.00	.00	.00	.28	.46	---	---	---
15	.00	a.32	.00	.00	.00	.00	.00	.00	.05	---	---	---
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	---
17	.00	.00	.00	.00	.00	.00	.11	.00	.00	---	---	---
18	.00	.00	.00	.00	.00	.00	.34	.00	.20	---	---	---
19	.00	a.03	.00	.00	.00	.00	.00	.00	.08	---	---	---
20	a.31	a.06	.00	.00	.00	.97	.00	.00	.00	---	---	---
21	.00	a.17	.00	.29	.00	.00	.00	.00	.22	---	---	---
22	.00	a.00	.03	.30	.00	.00	.00	.00	.16	---	---	---
23	.00	a.63	.04	.11	.00	.00	.00	.00	.00	---	---	---
24	.00	.00	1.31	.00	.00	.00	.00	.00	.00	---	---	---
25	.00	.00	1.33	.00	.00	.00	.00	.00	.06	---	---	---
26	.00	a.55	.00	.00	.00	.12	.00	.00	.00	---	---	---
27	.00	a.07	.90	.00	.00	.63	.00	.00	.00	---	---	---
28	.00	a.51	.11	.00	.00	.02	.28	.99	---	---	---	---
29	.00	a.02	.00	.31	---	.00	.00	.00	.00	---	---	---
30	.00	.00	.00	.00	---	.00	1.06	.00	.00	---	---	---
31	a.07	---	.00	.00	---	.00	---	.00	.00	---	---	---
TOTAL	3.74	3.37	8.36	1.05	0.97	3.35	4.92	6.32	1.74	---	---	---
MEAN	.12	.11	.27	.03	.03	.11	.16	.20	.12	---	---	---
MAX	1.60	.68	3.44	.31	.52	.97	1.08	1.68	1.25	---	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---

a Unit value stored.

b No unit values stored; all other days with values greater than .00 have unit values stored.

c Estimated.

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana
[Data include air temperature, solar radiation, wind speed, relative humidity, and soil temperature]

LOCATION.--Lat $39^{\circ}12'53''$, long $87^{\circ}02'12''$, in ~~SE $\frac{1}{4}$~~ sec. 14, T. 9 N., R. 6 W., Owen County, Hydrologic Unit 05120203, on south side
of Daggett and 1.0 mile southeast of Coal City.

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	17.5	13.5	.5	6.0	4.5	19.0	16.5	22.0	28.0	31.0	26.0
2	10.5	19.0	3.0	.5	-4.0	6.0	24.5	18.5	27.5	25.0	30.5	23.0
3	10.5	15.0	7.0	-8.0	-7.0	5.5	21.5	22.5	27.5	27.0	27.0	24.5
4	11.5	11.5	13.5	-5.0	-6.5	4.5	21.0	24.0	28.0	24.0	32.5	26.0
5	13.5	16.5	18.0	-0.5	-3.0	3.5	8.5	18.0	29.0	26.5	31.0	25.5
6	17.0	20.5	15.0	-0.5	2.0	4.5	13.0	14.5	28.5	31.0	28.5	25.0
7	28.5	21.0	15.5	-5.5	5.0	3.0	21.0	16.5	29.0	31.0	28.5	26.0
8	24.5	20.5	6.0	-8.0	-1.0	5.5	19.5	22.0	30.5	32.0	24.5	23.0
9	26.5	11.5	1.0	-7.5	3.5	6.0	19.5	19.5	31.0	33.5	28.0	23.5
10	26.0	11.0	2.0	-6.0	7.0	10.0	24.5	16.0	27.5	30.5	29.0	27.0
11	14.0	7.0	12.5	-9.5	-7.0	5.5	23.0	9.5	27.5	32.0	26.0	28.5
12	13.5	10.5	5.5	2.0	-7.0	15.5	24.0	16.5	30.0	32.5	27.0	30.0
13	16.5	13.0	5.5	-2.0	2.5	11.5	25.0	17.0	29.0	34.0	28.5	29.5
14	23.0	6.0	5.0	.0	7.0	9.0	22.0	17.0	32.0	31.0	27.5	24.0
15	24.0	6.5	1.5	-6.0	12.0	10.5	16.5	18.5	31.5	24.0	27.0	23.0
16	21.0	2.0	1.5	1.0	9.0	8.0	17.5	22.0	23.0	28.5	23.5	17.5
17	17.5	4.0	7.5	5.5	11.0	13.0	27.0	21.5	25.5	30.5	23.5	14.0
18	16.5	6.5	1.0	6.0	10.0	3.5	22.0	13.0	27.5	29.5	24.5	16.5
19	8.5	7.5	-7.5	5.5	13.0	-1.0	14.0	19.0	25.5	26.5	26.5	21.5
20	17.5	8.0	1.0	2.0	15.5	5.0	12.5	21.5	29.0	30.0	27.0	23.5
21	20.5	9.0	1.5	.0	14.5	12.5	16.5	24.5	27.0	26.5	27.5	25.0
22	23.5	7.5	4.0	6.0	14.0	8.5	16.5	25.0	27.0	25.5	28.5	19.0
23	14.5	7.0	.0	9.5	4.5	12.5	19.0	26.5	27.5	23.5	29.0	19.0
24	5.5	6.5	-9.5	11.0	10.5	16.5	11.5	25.0	33.0	29.0	31.5	22.5
25	7.0	2.5	-3.0	14.5	17.0	15.5	18.5	25.0	27.0	28.5	31.0	25.0
26	6.0	2.5	-1.0	12.0	12.0	19.0	27.5	19.0	26.5	26.5	30.0	28.5
27	6.5	1.0	8.0	6.0	19.0	17.0	28.5	20.5	27.0	28.0	26.0	23.0
28	8.5	6.0	2.0	2.0	17.0	24.0	28.0	24.5	29.5	25.5	25.0	19.0
29	9.0	14.0	1.0	.5	---	21.0	18.0	27.5	31.5	22.0	29.0	14.5
30	11.0	14.5	1.5	.0	---	18.5	17.5	24.0	31.0	25.0	30.5	28.5
31	14.5	---	.5	5.0	---	27.5	---	24.0	---	27.5	31.0	---
MAX	28.5	21.0	18.0	14.5	19.0	27.5	28.5	27.5	33.0	34.0	32.5	30.0
WTR YR 1981	MEAN	16.5	MAX	34.0	MIN	-9.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C.), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.5	20.5	11.0	-1.5	-0.5	12.0	21.5	22.5	21.5	24.0	27.5	24.0
2	12.0	22.0	4.0	6.0	2.5	14.0	21.5	23.5	24.0	28.0	32.0	28.0
3	16.0	24.5	7.5	12.0	-1.0	*.5	16.5	25.0	23.5	28.0	33.0	24.0
4	21.0	23.0	4.5	12.5	-1.0	9.5	7.5	26.5	15.0	32.5	34.0	25.5
5	27.0	15.0	5.5	6.5	-4.5	2.0	5.5	29.0	24.5	33.0	32.0	26.5
6	20.5	11.5	7.0	7.0	-11.0	*.0	*.5	28.0	26.5	31.5	30.5	26.0
7	16.0	14.5	12.0	-1.0	-2.5	-1.5	2.5	18.5	25.5	28.0	29.5	23.0
8	16.5	18.5	6.5	-2.5	3.0	3.5	1.0	23.0	25.5	29.5	29.0	26.5
9	18.5	13.0	1.5	-3.0	-3.0	1.5	*.5	26.5	27.5	30.5	26.0	28.0
10	16.5	9.0	.0	-20.0	-11.0	12.0	9.0	26.0	23.5	28.0	17.5	28.5
11	20.0	13.0	2.5	-12.0	-1.5	14.0	12.5	28.0	25.5	25.5	23.5	29.5
12	21.5	14.0	3.5	-6.0	*.0	19.0	16.5	29.5	23.0	28.5	25.0	29.0
13	22.5	16.0	4.0	-6.0	-2.5	18.0	17.5	30.0	26.0	29.0	26.5	28.5
14	17.0	16.5	5.0	-8.5	6.0	14.0	17.5	29.0	26.5	30.5	28.0	30.5
15	17.5	15.5	.5	-2.0	7.0	7.0	25.5	27.5	30.0	31.5	30.0	27.0
16	18.5	14.0	-0.5	-2.5	5.5	24.5	21.5	30.0	15.5	31.5	26.5	21.5
17	20.5	15.5	-2.5	-15.5	4.0	14.0	18.0	29.5	24.5	32.0	30.5	26.0
18	19.5	13.0	-11.0	-2.0	1.0	21.0	17.5	27.0	26.5	28.5	27.5	21.0
19	11.0	15.5	-10.5	*.0	3.0	9.5	18.0	27.0	21.0	30.0	29.0	20.5
20	21.0	5.5	-7.0	2.5	9.5	24.0	16.0	27.0	25.5	29.5	29.5	19.5
21	22.0	-1.0	2.0	*.5	6.0	9.0	12.0	25.5	24.5	29.5	25.5	16.5
22	10.0	3.0	3.5	10.5	9.5	8.5	15.5	25.5	24.5	26.5	25.0	16.5
23	6.0	5.0	2.0	10.0	14.5	12.5	17.5	21.5	24.0	28.0	24.5	20.5
24	7.0	3.5	*.0	-7.0	5.0	17.5	21.5	22.0	26.5	30.5	24.5	20.0
25	15.0	7.5	4.0	-2.5	.0	8.5	17.0	26.5	28.5	30.5	24.5	15.0
26	13.0	17.5	4.5	-7.0	4.0	1.0	20.5	25.5	28.0	31.0	25.0	19.0
27	11.5	6.0	4.0	6.0	8.5	3.0	16.5	23.5	29.5	27.5	24.0	20.0
28	19.5	4.0	1.5	5.0	12.5	9.5	17.0	25.5	26.0	28.0	23.5	23.5
29	21.0	7.5	-3.0	7.5	---	16.0	19.5	20.0	29.0	28.0	26.5	27.0
30	23.0	5.5	1.5	10.0	---	17.5	19.0	27.5	24.5	28.5	25.0	28.5
31	21.5	---	5.0	.0	---	17.5	---	26.5	---	28.0	29.0	---
MAX	27.0	24.5	12.0	12.5	14.5	24.5	25.5	30.0	30.0	33.0	34.0	30.5
WTR YR 1982	MEAN	16.0	MAX	34.0	MIN	-20.0						

Table 9.—Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.0	23.5	18.0	---	---	---	---	---	---	---	---	---
2	27.5	20.0	23.0	---	---	---	---	---	---	---	---	---
3	25.0	---	21.5	---	---	---	---	---	---	---	---	---
4	26.5	2.5	16.5	---	---	---	---	---	---	---	---	---
5	29.0	2.0	17.0	---	---	---	---	---	---	---	---	---
6	29.0	8.5	10.0	---	---	---	---	---	---	---	---	---
7	23.0	16.5	10.5	---	---	---	---	---	---	---	---	---
8	23.5	18.5	9.5	---	---	---	---	---	---	---	---	---
9	24.5	20.5	1.0	---	---	---	---	---	---	---	---	---
10	---	18.0	2.0	---	---	---	---	---	---	---	---	---
11	---	18.5	1.5	---	---	---	---	---	---	---	---	---
12	---	17.0	-2.5	---	---	---	---	---	---	---	---	---
13	18.0	-0.5	2.0	---	---	---	---	---	---	---	---	---
14	13.5	3.5	8.5	---	---	---	---	---	---	---	---	---
15	21.0	3.0	8.5	---	---	---	---	---	---	---	---	---
16	14.0	7.0	1.5	---	---	---	---	---	---	---	---	---
17	16.0	---	---	---	---	---	---	---	---	---	---	---
18	21.5	15.0	---	---	---	---	---	---	---	---	---	---
19	20.0	16.0	---	---	---	---	---	---	---	---	---	---
20	18.0	16.0	---	---	---	---	---	---	---	---	---	---
21	6.0	15.5	---	---	---	---	---	---	---	---	---	---
22	11.0	12.0	---	---	---	---	---	---	---	---	---	---
23	12.0	12.5	---	---	---	---	---	---	---	---	---	---
24	14.5	.5	---	---	---	---	---	---	---	---	---	---
25	17.0	2.0	---	---	---	---	---	---	---	---	---	---
26	19.0	3.0	---	---	---	---	---	---	---	---	---	---
27	20.0	4.5	---	---	---	---	---	---	---	---	---	---
28	21.5	13.5	---	---	---	---	---	---	---	---	---	---
29	17.5	10.0	---	---	---	---	---	---	---	---	---	---
30	17.5	18.0	---	---	---	---	---	---	---	---	---	---
31	18.5	---	---	---	---	---	---	---	---	---	---	---
MAX	29.0	23.5	23.0	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	14.0	MAX	29.0	MIN	-2.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	-0.5	-4.0	-6.0	-4.5	.5	10.5	7.5	15.0	19.5	15.5	20.0
2	6.0	8.5	-7.5	-12.5	-13.5	-3.0	2.5	3.5	17.5	17.0	17.5	18.0
3	3.0	6.5	-3.0	-14.5	-15.0	-6.0	13.0	5.5	20.0	16.0	20.0	18.0
4	2.0	-1.0	8.0	-17.0	-13.0	1.0	9.0	11.5	20.0	16.0	18.0	18.5
5	.5	-3.5	11.0	-5.5	-18.0	-0.5	4.0	9.5	20.5	18.0	20.0	14.5
6	.5	12.0	10.5	-17.5	-3.0	-3.0	-1.0	8.5	19.5	19.0	20.5	15.5
7	7.0	8.5	1.0	-14.5	-3.0	-7.0	3.5	4.0	12.0	19.0	19.5	14.0
8	11.5	11.0	1.5	-18.0	-10.5	-6.0	13.0	6.0	18.0	20.5	16.5	13.0
9	8.5	.5	-2.5	-17.5	-11.0	-5.0	9.5	14.0	19.5	22.5	15.0	9.5
10	8.0	-0.5	-1.0	-16.0	-4.5	-0.5	9.5	11.0	14.0	19.0	17.5	10.5
11	7.0	-3.5	.5	-17.0	-20.0	-3.5	16.0	6.0	16.0	16.5	16.0	14.5
12	1.5	-2.5	-3.5	-7.5	-23.5	-3.0	15.5	.5	19.0	16.5	13.5	15.0
13	-0.5	6.5	-5.0	-6.5	-14.0	1.0	15.5	6.5	23.0	22.0	15.5	17.0
14	7.5	3.0	.5	-7.0	-9.0	-6.0	7.5	9.5	21.5	20.5	17.0	19.0
15	10.0	-2.0	-3.5	-15.0	-2.0	.5	1.5	6.5	20.5	14.5	19.0	14.0
16	17.0	.5	-7.5	-15.5	6.5	-1.5	3.5	5.5	13.0	17.5	15.0	10.5
17	6.5	-3.0	-1.0	-8.0	6.0	-1.0	15.5	11.0	10.5	19.0	14.5	7.0
18	6.0	-6.0	-12.5	-4.5	7.5	-3.5	12.5	5.5	12.5	18.0	13.0	7.0
19	1.0	-4.0	-15.5	1.5	5.0	-4.0	10.5	7.0	14.0	20.5	15.5	8.5
20	4.0	-2.5	-13.0	-1.0	2.5	-4.5	5.5	5.0	14.5	20.0	14.0	11.0
21	5.5	-3.5	-10.0	-4.0	.5	-3.5	1.0	5.5	18.5	15.5	14.5	11.0
22	8.5	4.5	-1.5	-6.5	4.5	1.5	8.5	8.0	15.5	12.5	14.0	8.0
23	5.5	2.0	-12.5	-4.0	.0	-1.5	11.5	13.5	13.5	14.0	15.0	4.5
24	2.5	-1.0	-20.5	-4.5	1.0	-3.0	6.0	17.0	16.0	16.0	16.5	5.5
25	-0.5	-4.0	-12.0	-1.5	-2.0	-2.0	1.5	13.0	16.0	18.0	18.5	12.5
26	-2.0	.0	-6.5	2.5	1.5	8.0	10.5	16.0	12.5	19.0	19.0	15.5
27	-2.0	-0.5	-10.0	-3.0	.0	7.5	16.0	15.5	12.5	18.0	17.5	11.5
28	-1.0	.0	.0	-5.5	3.5	6.5	15.0	12.0	14.0	19.5	19.5	6.5
29	-3.0	-2.5	-1.0	-9.0	---	12.5	12.0	13.5	18.5	11.5	20.0	4.5
30	-3.5	7.5	-1.0	-8.5	---	10.5	9.0	16.5	19.0	12.0	20.0	11.5
31	3.0	---	-1.0	-8.5	---	10.0	---	11.0	---	12.5	20.0	---
MIN	-3.5	-6.0	-20.5	-18.0	-23.5	-7.0	-1.0	.5	10.5	11.5	13.0	4.5
WTR YR 1981	MEAN	6.0	MAX	23.0	MIN	-23.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C.), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	13.0	4.5	-9.0	-14.0	-3.0	2.0	9.0	10.0	12.0	14.0	17.0
2	1.5	12.5	•0	-6.0	-8.0	1.5	10.0	8.5	3.0	9.5	14.0	17.0
3	-0.5	10.0	-2.5	3.5	-5.0	-5.5	2.0	7.5	13.5	13.0	16.5	11.5
4	7.0	10.5	-0.5	-4.0	-10.0	-2.0	-1.0	9.5	11.5	13.5	21.0	9.0
5	14.0	8.0	-3.5	-9.0	-11.5	-3.5	-2.0	12.0	6.0	15.0	19.5	9.0
6	8.5	2.0	-6.0	-0.5	-20.5	-3.0	-5.5	14.5	7.5	17.5	19.0	10.5
7	4.0	-2.5	3.0	-12.5	-20.0	-5.5	-8.0	9.5	12.0	21.5	19.0	16.5
8	1.5	4.0	-1.5	-14.0	-12.0	-10.5	-2.5	7.0	12.5	17.0	20.0	14.0
9	6.0	1.0	-4.0	-19.5	-20.5	-8.5	-1.0	11.5	9.5	15.0	17.0	13.0
10	10.0	-3.0	-6.5	-26.5	-28.0	10.0	-3.5	12.0	16.0	20.0	14.0	15.5
11	9.0	-1.5	-6.5	-20.5	-15.5	4.5	-3.0	13.0	5.5	16.0	13.0	16.5
12	8.0	•0	-8.5	-17.0	-12.5	1.0	4.0	13.5	13.5	12.5	9.5	19.5
13	9.0	•0	-7.0	-16.0	-10.0	4.0	9.0	15.0	8.0	14.5	10.5	19.5
14	9.0	-1.0	-1.0	-16.0	-6.0	1.0	2.5	14.0	6.5	15.0	11.0	19.0
15	10.5	-1.0	-7.0	-22.0	3.0	4.5	6.0	16.0	12.0	15.0	12.5	4.0
16	8.0	3.5	-9.0	-26.5	1.5	6.0	15.5	14.5	10.5	19.0	18.5	13.0
17	7.0	3.5	-11.0	-30.5	-0.5	6.0	8.5	14.5	3.0	20.5	15.5	9.5
18	5.5	•0	-18.5	-17.0	-1.0	4.0	2.0	15.5	5.5	20.0	14.0	12.0
19	1.0	6.0	-21.5	-7.0	•0	6.0	5.5	14.0	9.5	19.5	11.0	8.5
20	3.5	-2.5	-20.5	-5.0	1.5	7.0	5.0	15.5	3.0	19.5	14.5	9.0
21	8.5	-4.5	-8.5	-3.5	•0	4.0	•0	13.0	8.0	18.0	14.5	7.0
22	4.0	-7.5	-0.5	-4.5	-0.5	2.0	1.0	15.5	8.5	18.5	9.0	5.5
23	-3.5	-4.0	-7.5	-8.5	1.5	-1.0	•5	6.0	11.0	17.5	15.5	3.5
24	-5.5	1.0	-8.5	-13.5	-0.5	4.5	5.5	6.5	8.0	17.5	14.0	12.5
25	-1.0	1.0	-7.5	-16.0	-4.5	1.5	7.5	7.5	8.0	17.0	14.5	10.0
26	7.0	7.0	-2.5	-21.5	-8.0	-3.0	10.0	15.5	17.0	18.0	10.0	10.0
27	3.0	1.5	-2.5	-11.5	-2.5	-5.5	7.0	12.0	12.5	19.5	15.5	10.0
28	.5	-1.5	-4.5	-6.0	-3.0	-6.5	4.0	8.5	13.5	17.5	11.0	7.0
29	7.0	-3.0	-11.5	-7.5	---	-2.0	6.5	12.5	13.0	15.5	11.5	12.5
30	8.5	-2.0	-12.0	-0.5	---	11.5	9.5	14.0	12.5	16.0	11.0	11.5
31	9.5	---	1.0	-7.0	---	6.5	---	10.0	---	15.0	15.5	---
MIN	-5.5	-7.5	-21.5	-30.5	-28.0	-10.5	-8.0	6.0	3.0	9.5	9.0	3.5
WTR YR 1982	MEAN	4.0	MAX	21.5	MIN	-30.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C.), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.5	15.0	13.0	---	---	---	---	---	---	---	---	---
2	12.0	12.0	17.5	---	---	---	---	---	---	---	---	---
3	13.0	---	15.0	---	---	---	---	---	---	---	---	---
4	15.5	-2.5	13.5	---	---	---	---	---	---	---	---	---
5	13.5	-2.5	10.0	---	---	---	---	---	---	---	---	---
6	15.0	-5.5	-0.5	---	---	---	---	---	---	---	---	---
7	11.0	3.0	-1.5	---	---	---	---	---	---	---	---	---
8	11.0	8.5	-0.5	---	---	---	---	---	---	---	---	---
9	18.5	6.0	-5.5	---	---	---	---	---	---	---	---	---
10	---	9.0	-1.5	---	---	---	---	---	---	---	---	---
11	---	13.0	-5.5	---	---	---	---	---	---	---	---	---
12	---	-2.0	-9.5	---	---	---	---	---	---	---	---	---
13	5.5	-6.0	-10.0	---	---	---	---	---	---	---	---	---
14	8.5	-4.5	.0	---	---	---	---	---	---	---	---	---
15	6.0	-7.5	.0	---	---	---	---	---	---	---	---	---
16	2.5	-5.0	-1.5	---	---	---	---	---	---	---	---	---
17	2.0	---	---	---	---	---	---	---	---	---	---	---
18	5.5	3.5	---	---	---	---	---	---	---	---	---	---
19	11.0	12.5	---	---	---	---	---	---	---	---	---	---
20	1.5	14.5	---	---	---	---	---	---	---	---	---	---
21	-2.0	9.0	---	---	---	---	---	---	---	---	---	---
22	-2.0	9.0	---	---	---	---	---	---	---	---	---	---
23	-0.5	1.5	---	---	---	---	---	---	---	---	---	---
24	-0.5	-6.5	---	---	---	---	---	---	---	---	---	---
25	.5	-8.0	---	---	---	---	---	---	---	---	---	---
26	-1.5	1.0	---	---	---	---	---	---	---	---	---	---
27	.0	-0.5	---	---	---	---	---	---	---	---	---	---
28	11.5	2.0	---	---	---	---	---	---	---	---	---	---
29	5.5	4.0	---	---	---	---	---	---	---	---	---	---
30	5.5	5.5	---	---	---	---	---	---	---	---	---	---
31	15.0	---	---	---	---	---	---	---	---	---	---	---
MIN	-2.0	-8.0	-10.0	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	4.5	MAX	18.5	MIN	-10.0						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	8.0	3.0	-2.5	---	2.5	15.5	12.0	18.0	---	23.0	22.0
2	7.5	13.0	-2.5	-3.5	---	1.0	15.0	11.0	22.5	---	24.0	---
3	6.5	10.5	2.0	-12.0	---	---	18.0	14.5	23.0	---	23.5	---
4	---	6.0	10.5	-11.0	---	2.5	16.0	18.5	24.0	---	25.0	21.0
5	---	6.0	14.0	-2.5	-10.0	1.5	6.0	16.0	23.5	---	23.5	19.5
6	---	15.5	13.5	-10.0	-1.0	.0	6.5	10.5	23.0	---	23.5	19.5
7	17.0	---	11.5	-11.0	.5	-1.0	13.0	10.5	21.5	---	24.0	19.0
8	17.5	16.0	4.0	-12.5	-6.0	.0	16.5	15.0	24.5	---	20.5	18.5
9	16.5	7.5	-1.0	---	-3.5	1.5	15.0	15.5	26.0	---	21.5	16.5
10	---	---	.5	---	2.0	4.5	16.5	14.0	---	---	22.0	18.5
11	---	---	6.0	---	-15.5	.5	19.0	7.0	21.5	---	21.0	21.0
12	---	---	2.0	-3.5	-15.0	6.5	19.0	9.5	24.5	---	20.0	22.0
13	---	9.5	-0.5	-4.0	-6.0	6.5	20.5	---	26.0	---	21.5	23.0
14	---	4.5	2.5	-2.5	-1.5	2.0	14.5	---	---	---	22.5	21.0
15	---	2.5	-0.5	-9.5	4.5	5.5	10.0	---	---	---	22.0	18.5
16	18.0	1.0	-2.5	-8.5	7.5	2.0	11.5	---	---	---	19.5	14.5
17	12.5	.5	2.5	-1.5	8.0	6.0	20.5	---	---	---	18.5	10.0
18	---	-1.0	-7.5	1.5	9.0	.5	17.5	---	---	---	18.5	---
19	---	1.5	-12.0	3.0	---	-2.5	12.0	---	---	---	21.0	---
20	---	2.5	-8.5	.5	8.0	.5	9.5	14.0	---	---	20.5	---
21	---	3.0	-4.5	-1.5	6.5	4.5	8.5	16.0	---	---	21.0	---
22	15.5	6.0	.5	-2.0	10.5	5.0	14.0	17.5	---	---	21.0	---
23	11.0	---	-4.0	3.5	2.0	5.5	16.0	20.5	---	---	21.5	---
24	4.5	---	-14.0	---	4.5	7.5	9.0	20.0	---	---	23.5	---
25	3.0	---	-6.0	---	7.0	8.5	10.5	19.5	---	---	24.0	---
26	---	.5	-4.0	---	6.0	13.5	19.0	17.5	---	---	23.5	---
27	---	.0	-2.5	---	9.5	11.5	22.5	17.5	---	---	21.5	---
28	---	3.0	1.0	---	9.0	15.5	21.5	18.5	---	---	23.0	---
29	---	6.0	.0	---	---	16.0	14.5	21.0	---	---	24.0	---
30	---	11.5	.5	---	---	14.0	13.5	20.5	---	---	25.0	---
31	8.5	---	.0	---	---	19.0	---	18.0	---	---	---	---
MEAN	11.5	6.0	.0	-4.5	1.5	5.5	14.5	15.5	23.0	---	22.0	19.0
WTR YR 1981	MEAN	9.5	MAX	26.0	MIN	-15.5						

Table 9.—Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana—Continued

 TEMPERATURE, AIR (DEG. C.), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	16.5	8.5	-5.5	-7.0	4.0	11.5	---	16.0	17.5	---	19.5
2	---	16.0	2.5	0	-2.5	6.5	15.5	---	15.0	19.0	22.5	22.5
3	---	16.5	3.0	5.5	-3.5	---	7.5	---	18.0	20.5	25.0	17.5
4	---	16.5	2.0	0.5	-6.5	---	3.5	---	13.0	22.5	26.5	17.0
5	---	11.5	0	-0.5	-7.5	-1.5	2.5	---	16.5	25.5	23.5	17.5
6	---	7.0	.5	3.5	-16.0	-1.5	-3.0	---	18.5	25.5	24.5	18.0
7	---	5.5	6.5	-6.5	-10.5	-4.0	-2.5	---	18.0	25.0	24.5	19.5
8	---	11.0	---	-8.0	-4.0	-2.5	-0.5	---	18.5	22.5	24.0	19.0
9	---	7.0	-1.0	-12.0	-9.5	-5.5	-0.5	---	19.0	22.5	22.0	20.0
10	---	2.0	-3.0	-23.5	-18.5	11.0	2.5	---	20.0	22.0	16.0	21.5
11	---	4.0	-2.5	-16.5	-9.0	10.5	4.0	---	17.0	---	17.0	22.5
12	---	6.5	-3.0	-10.5	-5.5	9.5	7.5	---	17.0	21.5	17.5	23.5
13	---	6.5	-1.5	-9.0	-6.0	10.0	13.5	---	18.0	22.0	18.5	22.5
14	---	6.5	1.0	-12.0	5	7.0	10.5	---	18.5	23.5	19.5	23.0
15	---	6.5	-2.5	-10.5	5.0	5.5	16.5	---	20.5	24.0	21.5	19.0
16	---	---	-4.0	-18.0	4.5	16.0	18.0	---	12.5	---	22.0	17.0
17	---	---	-6.0	-22.0	1.5	9.0	12.5	---	13.5	---	22.5	17.5
18	---	---	-13.0	-10.0	.0	12.0	10.5	---	17.5	---	21.0	17.0
19	---	13.0	-17.0	-2.5	1.5	7.5	13.0	21.0	16.5	---	20.5	14.5
20	---	---	---	-1.5	5.5	13.5	12.0	21.5	15.5	---	22.0	13.5
21	---	---	---	-0.5	---	5.5	6.5	19.0	17.5	---	20.0	11.0
22	---	-2.0	---	1.0	---	4.5	9.0	20.0	17.5	---	18.5	10.5
23	---	1.0	---	-2.0	---	5.5	9.5	15.5	18.0	---	20.5	12.5
24	---	3.0	---	-10.5	2.5	10.5	---	15.0	18.5	---	19.5	15.0
25	---	4.0	---	-8.5	-2.5	4.5	---	18.0	19.5	---	20.0	12.5
26	---	12.5	---	-14.0	-2.5	-0.5	---	21.0	21.5	---	17.5	13.5
27	---	3.5	---	-2.0	2.0	-1.5	---	19.0	22.5	---	19.5	14.0
28	9.0	.5	---	1.5	3.5	1.0	---	18.5	18.5	---	17.5	15.0
29	13.0	1.0	---	0	---	8.0	---	16.5	20.5	---	18.5	19.0
30	15.5	1.0	---	4.5	---	14.5	---	21.5	19.0	---	19.5	19.0
31	16.0	---	2.5	-3.0	---	14.0	---	16.5	---	---	21.0	---
MEAN	13.5	7.0	-1.5	-6.0	-3.5	6.0	8.0	18.5	17.5	22.5	21.0	17.5
WTR YR 1982	MEAN	9.0	MAX	26.5	MN	-23.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

TEMPERATURE, AIR (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	19.0	15.0	---	---	---	---	---	---	---	---	---
2	18.5	16.0	20.0	---	---	---	---	---	---	---	---	---
3	18.5	---	16.0	---	---	---	---	---	---	---	---	---
4	19.5	.0	15.0	---	---	---	---	---	---	---	---	---
5	20.0	.0	14.5	---	---	---	---	---	---	---	---	---
6	21.5	1.0	4.5	---	---	---	---	---	---	---	---	---
7	17.5	9.0	3.0	---	---	---	---	---	---	---	---	---
8	17.5	12.5	4.0	---	---	---	---	---	---	---	---	---
9	21.0	12.5	-2.0	---	---	---	---	---	---	---	---	---
10	---	14.0	1.0	---	---	---	---	---	---	---	---	---
11	---	16.0	-1.0	---	---	---	---	---	---	---	---	---
12	---	8.0	-6.5	---	---	---	---	---	---	---	---	---
13	11.0	-4.0	-4.0	---	---	---	---	---	---	---	---	---
14	10.5	-0.5	4.0	---	---	---	---	---	---	---	---	---
15	12.5	-2.5	5.5	---	---	---	---	---	---	---	---	---
16	8.0	1.0	.0	---	---	---	---	---	---	---	---	---
17	8.0	---	---	---	---	---	---	---	---	---	---	---
18	13.0	10.0	---	---	---	---	---	---	---	---	---	---
19	15.5	14.0	---	---	---	---	---	---	---	---	---	---
20	8.0	15.5	---	---	---	---	---	---	---	---	---	---
21	1.5	12.0	---	---	---	---	---	---	---	---	---	---
22	3.5	10.5	---	---	---	---	---	---	---	---	---	---
23	4.5	9.0	---	---	---	---	---	---	---	---	---	---
24	6.0	-3.5	---	---	---	---	---	---	---	---	---	---
25	7.5	-3.5	---	---	---	---	---	---	---	---	---	---
26	7.5	2.0	---	---	---	---	---	---	---	---	---	---
27	9.5	2.0	---	---	---	---	---	---	---	---	---	---
28	15.5	7.5	---	---	---	---	---	---	---	---	---	---
29	13.0	6.0	---	---	---	---	---	---	---	---	---	---
30	11.5	11.5	---	---	---	---	---	---	---	---	---	---
31	16.5	---	---	---	---	---	---	---	---	---	---	---
MEAN	12.5	7.0	5.5	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	9.0	---	MAX	21.5	MIN	-6.5	---	---	---	---	---

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

INTENSITY OF INCIDENTAL SOLAR RADIATION, IN CALORIES PE, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	440	309	147	133	111	446	397	186	327	584	130
2	311	370	78	426	179	183	518	533	302	321	354	218
3	170	271	268	52	170	389	258	525	322	349	237	235
4	230	402	92	373	222	101	182	360	433	217	492	327
5	424	506	144	233	319	97	153	175	243	290	332	499
6	436	306	234	218	281	210	495	326	327	517	344	467
7	552	258	316	235	133	250	431	534	608	520	457	408
8	413	295	88	132	328	208	299	472	398	608	278	455
9	559	413	87	90	289	234	484	178	464	590	433	504
10	452	361	123	320	185	221	252	170	387	574	381	528
11	239	397	203	311	137	216	211	100	265	584	414	440
12	456	321	327	75	384	499	235	480	318	537	493	488
13	454	139	171	271	361	430	176	228	345	493	536	461
14	369	89	168	126	424	473	314	187	553	496	283	164
15	371	165	129	132	381	215	524	329	600	228	337	274
16	192	188	251	233	113	378	268	508	244	335	424	254
17	264	170	294	407	183	398	374	307	601	468	507	248
18	336	269	203	386	114	275	495	167	604	495	540	419
19	261	379	244	133	199	86	122	315	286	259	500	503
20	271	361	382	109	484	107	313	577	454	376	545	517
21	383	436	301	117	263	390	543	585	262	428	447	519
22	483	199	206	217	202	171	176	559	463	421	563	330
23	404	145	212	356	124	462	450	306	609	339	496	498
24	96	140	114	400	297	503	137	269	514	510	455	493
25	196	123	234	316	529	411	544	519	516	409	493	317
26	178	148	63	322	421	323	375	189	571	307	512	388
27	140	88	251	296	352	405	524	202	574	369	255	503
28	197	152	203	366	184	428	463	521	588	241	200	492
29	415	329	101	308	---	205	175	507	587	357	411	224
30	417	279	97	368	---	253	261	191	380	584	386	481
31	386	---	80	377	---	488	---	539	---	580	463	---
TOTAL	10,544	8,139	5,973	7,852	7,391	9,120	10,198	11,255	13,004	13,129	13,152	11,784

Table 9.—Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana—Continued

INTENSITY OF INCIDENTAL SOLAR RADIATION, IN CALORIES PE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	407	147	114	190	195	338	529	293	473	315	399	128
2	302	158	45	95	177	120	267	490	575	404	532	431
3	455	295	428	53	55	155	191	551	549	425	577	523
4	245	222	42	33	307	150	508	573	28	576	390	528
5	452	108	212	221	78	191	99	492	618	577	349	544
6	356	295	160	16	327	112	355	327	629	526	475	319
7	461	300	53	174	326	318	322	188	208	354	512	134
8	469	198	137	215	158	299	97	470	244	380	416	428
9	430	87	196	234	261	108	105	563	443	531	543	457
10	187	222	222	196	253	8.6	389	536	674	271	125	436
11	476	262	185	192	337	277	338	555	481	387	469	441
12	416	275	219	121	162	150	186	574	270	628	577	266
13	395	259	195	151	260	457	380	575	671	535	605	196
14	204	273	113	141	332	258	562	392	685	582	578	348
15	194	185	204	133	110	73	527	473	408	594	467	256
16	469	171	104	195	49	373	122	480	127	524	280	404
17	193	395	105	130	141	341	297	575	582	481	490	456
18	231	277	185	215	43	395	590	286	547	333	593	417
19	433	27	224	55	75	64	293	517	410	318	573	343
20	475	132	304	103	157	331	480	482	622	471	312	277
21	409	110	118	70	257	338	584	344	653	592	575	347
22	154	189	133	29	312	240	577	426	451	231	465	246
23	255	42	250	149	386	283	535	474	665	403	172	415
24	413	31	283	240	84	461	527	431	666	527	126	139
25	367	80	342	107	328	92	185	546	602	531	508	96
26	170	63	141	275	315	263	240	347	324	377	361	265
27	161	184	130	270	389	514	410	390	497	318	285	202
28	299	137	120	279	398	515	513	508	225	420	549	417
29	290	202	206	186	466	230	115	531	505	515	413	406
30	297	37	244	11	109	202	499	632	540	116	329	—
31	230	—	41	31	—	456	—	377	—	548	329	—
TOTAL	10,295	5,363	5,455	4,510	6,272	8,256.6	10,640	13,849	14,490	14,204	13,263	10,278

Table 9.—Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana—Continued

INTENSITY OF INCIDENTAL SOLAR RADIATION, IN CALORIES PE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
SUMMATION VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	126	44	---	---	---	---	---	---	---	---	---
2	366	64	126	---	---	---	---	---	---	---	---	---
3	200	---	16	---	---	---	---	---	---	---	---	---
4	226	158	20	---	---	---	---	---	---	---	---	---
5	339	116	141	---	---	---	---	---	---	---	---	---
6	244	253	144	---	---	---	---	---	---	---	---	---
7	308	259	211	---	---	---	---	---	---	---	---	---
8	95	208	202	---	---	---	---	---	---	---	---	---
9	132	248	205	---	---	---	---	---	---	---	---	---
10	----	130	41	---	---	---	---	---	---	---	---	---
11	----	85	89	---	---	---	---	---	---	---	---	---
12	----	56	206	---	---	---	---	---	---	---	---	---
13	276	247	207	---	---	---	---	---	---	---	---	---
14	193	165	58	---	---	---	---	---	---	---	---	---
15	328	266	15	---	---	---	---	---	---	---	---	---
16	374	160	24	---	---	---	---	---	---	---	---	---
17	344	---	---	---	---	---	---	---	---	---	---	---
18	358	101	---	---	---	---	---	---	---	---	---	---
19	170	35	---	---	---	---	---	---	---	---	---	---
20	99	23	---	---	---	---	---	---	---	---	---	---
21	254	60	---	---	---	---	---	---	---	---	---	---
22	350	60	---	---	---	---	---	---	---	---	---	---
23	340	34	---	---	---	---	---	---	---	---	---	---
24	341	232	---	---	---	---	---	---	---	---	---	---
25	330	117	---	---	---	---	---	---	---	---	---	---
26	321	36	---	---	---	---	---	---	---	---	---	---
27	311	150	---	---	---	---	---	---	---	---	---	---
28	301	26	---	---	---	---	---	---	---	---	---	---
29	272	81	---	---	---	---	---	---	---	---	---	---
30	83	172	---	---	---	---	---	---	---	---	---	---
31	41	---	---	---	---	---	---	---	---	---	---	---

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.7	11	4.9	---	.0	.0	5.0	4.7	---	1.8	4.4
2	4.4	7.4	3.4	5.3	---	.0	.0	2.6	4.1	---	2.5	---
3	2.0	5.3	3.8	4.4	---	---	.0	4.1	5.2	---	2.9	---
4	---	2.9	6.2	3.6	---	.0	.0	4.2	2.6	---	1.9	2.6
5	---	5.4	6.4	7.0	.2	.0	.0	3.4	4.4	---	2.8	2.7
6	---	6.8	5.7	6.2	---	.0	.0	7.7	3.4	---	3.0	2.9
7	3.1	---	7.2	2.7	---	.0	.0	7.2	1.9	---	3.3	2.6
8	3.5	5.7	5.1	2.7	---	.0	.0	4.1	7.3	---	3.5	4.1
9	3.7	4.5	5.0	---	---	.0	.0	3.3	4.1	---	2.6	1.5
10	---	---	3.7	---	---	.0	.0	4.1	---	---	2.6	3.6
11	---	---	6.6	---	---	.0	.0	4.9	2.3	---	2.1	3.1
12	---	---	5.0	5.4	---	.0	.0	2.3	3.0	---	1.8	2.1
13	---	3.8	3.1	2.6	---	.0	.0	0.0	6.4	---	1.5	3.2
14	---	5.5	2.5	3.5	---	.0	.0	0.0	---	---	2.7	2.1
15	---	5.2	4.3	5.6	0	.0	.0	.1	---	---	4.2	3.0
16	7.3	5.4	5.2	4.9	0	.0	.0	0	---	---	3.6	3.1
17	3.0	3.4	4.2	4.9	0	.0	.7	---	---	---	5.4	4.0
18	---	2.0	7.3	3.9	0	.0	.2	---	---	---	4.5	---
19	---	5.0	3.9	2.7	---	.0	.0	0	4.6	---	4.4	---
20	---	4.3	2.5	3.3	.0	.0	.0	0	---	---	3.9	---
21	---	3.0	3.5	4.9	0	.0	.0	1.9	---	---	3.4	---
22	4.4	3.7	5.4	1.5	0	.0	.0	3.1	---	---	2.2	---
23	5.3	---	6.5	3.3	0	.0	.0	3.8	---	---	1.8	---
24	7.7	---	2.9	---	0	.0	.0	4.9	---	---	1.4	---
25	4.5	---	4.5	---	0	.0	.0	3.0	---	---	1.8	---
26	---	8.2	3.1	---	.0	.0	.0	3.2	---	---	3.2	---
27	---	7.4	2.2	---	.0	.0	.0	4.7	---	---	4.2	---
28	---	9.1	4.0	---	.0	.0	.1	3.1	---	---	4.3	---
29	---	8.5	3.9	---	---	.0	2.2	4.7	---	---	4.6	---
30	---	7.6	6.6	---	---	.0	4.3	4.2	---	---	4.3	---
31	3.2	---	6.3	---	---	.0	---	4.7	---	---	4.3	---
MEAN	4.3	5.3	4.9	4.2	.0	.0	.3	4.1	4.1	---	3.1	3.0
WTR YR 1981	MEAN	2.8	MAX	11	MIN	.0						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

DAY	WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES											SEP
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1	2.1	11	5.8	.0	3.6	3.0	---	4.4	1.9	---	4.5	
2	1.6	5.1	5.2	1.5	6.0	8.0	---	1.3	2.6	2.1	4.5	
3	2.4	4.0	4.8	5.5	---	16	---	3.7	3.6	2.2	2.8	
4	4.3	7.6	12	5.3	---	7.4	---	5.3	1.8	2.6	1.3	
5	4.2	2.5	6.9	4.3	3.7	9.2	---	3.2	1.8	2.7	1.3	
6	6.9	4.8	5.6	4.0	3.8	9.0	---	1.9	3.4	3.2	1.3	
7	1.9	6.6	6.9	6.0	6.9	4.1	---	3.0	3.9	3.3	1.9	
8	4.0	---	6.3	2.5	6.0	5.3	---	2.5	1.7	3.2	3.0	
9	5.8	6.1	9.1	6.7	7.0	6.5	---	3.1	1.7	2.9	1.8	
10	2.9	5.3	12	1.8	7.8	5.0	---	4.8	4.1	1.5	2.2	
11	2.5	2.2	7.9	2.6	6.5	2.3	---	1.1	---	2.7	1.9	
12	3.3	2.5	2.2	3.6	6.3	6.9	---	1.6	1.5	2.0	2.2	
13	3.0	2.9	3.2	4.9	9.1	7.4	---	2.3	1.6	1.8	2.6	
14	2.0	3.1	3.4	8.3	4.4	4.3	---	2.6	1.4	1.7	2.9	
15	2.1	4.3	4.1	5.5	5.9	5.5	---	6.0	1.8	1.2	2.1	
16	---	2.7	9.9	4.8	9.3	8.0	---	3.4	---	2.3	2.3	
17	---	7.0	5.0	6.4	3.4	9.1	---	1.5	---	2.5	2.6	
18	---	5.5	4.0	3.2	4.9	3.2	---	2.0	---	3.3	3.5	
19	7.4	2.8	3.0	5.0	11	4.7	4.5	3.5	---	1.7	2.1	
20	---	3.1	5.7	4.2	7.8	3.6	5.0	---	2.8	---	2.9	
21	---	---	4.4	---	8.0	3.6	3.5	2.4	---	3.2	2.9	
22	1.8	---	7.4	---	4.5	2.8	6.0	4.9	---	3.7	2.3	
23	3.3	---	12	---	2.9	3.8	2.5	3.0	---	2.0	3.4	
24	3.4	---	8.2	6.3	4.1	---	2.0	1.9	---	2.9	5.1	
25	4.9	---	6.7	7.0	6.4	---	2.8	1.7	---	3.9	2.1	
26	---	11	---	2.3	5.9	6.3	---	3.3	1.3	---	1.5	2.5
27	6.5	---	7.8	7.2	4.3	---	3.6	2.5	---	2.3	1.2	
28	.9	3.1	---	6.8	4.1	2.6	---	3.1	2.5	---	3.8	2.3
29	2.9	2.1	---	3.7	---	5.4	---	3.7	2.5	---	2.9	1.8
30	3.6	6.0	---	7.9	---	13	---	3.1	4.2	---	1.0	
31	2.2	---	6.6	2.7	---	7.5	---	4.3	---	2.1	---	
MEAN	2.4	3.9	4.9	6.1	4.7	6.0	6.2	3.5	3.0	2.3	2.5	
WTR YR 1982	MEAN	4.2	MAX	16	MIN	0						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1982 TO DECEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.8	7.0	3.7	---	---	---	---	---	---	---	---	---
2	1.6	4.8	7.9	---	---	---	---	---	---	---	---	---
3	1.0	---	4.9	---	---	---	---	---	---	---	---	---
4	1.8	4.4	3.6	---	---	---	---	---	---	---	---	---
5	1.2	5.0	9.7	---	---	---	---	---	---	---	---	---
6	3.3	2.6	5.8	---	---	---	---	---	---	---	---	---
7	2.3	6.2	1.4	---	---	---	---	---	---	---	---	---
8	1.5	3.8	3.8	---	---	---	---	---	---	---	---	---
9	5.4	1.9	4.0	---	---	---	---	---	---	---	---	---
10	---	4.5	4.7	---	---	---	---	---	---	---	---	---
11	---	8.1	6.0	---	---	---	---	---	---	---	---	---
12	---	13	3.3	---	---	---	---	---	---	---	---	---
13	2.7	4.6	5.5	---	---	---	---	---	---	---	---	---
14	4.3	5.1	9.7	---	---	---	---	---	---	---	---	---
15	4.1	2.3	6.1	---	---	---	---	---	---	---	---	---
16	2.8	3.1	5.5	---	---	---	---	---	---	---	---	---
17	2.3	---	---	---	---	---	---	---	---	---	---	---
18	3.8	3.6	---	---	---	---	---	---	---	---	---	---
19	6.0	3.6	---	---	---	---	---	---	---	---	---	---
20	8.2	8.6	---	---	---	---	---	---	---	---	---	---
21	1.8	6.1	---	---	---	---	---	---	---	---	---	---
22	2.3	2.9	---	---	---	---	---	---	---	---	---	---
23	3.2	5.5	---	---	---	---	---	---	---	---	---	---
24	3.0	5.7	---	---	---	---	---	---	---	---	---	---
25	1.9	1.5	---	---	---	---	---	---	---	---	---	---
MEAN	3.1	5.0	5.4	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	4.4	MAX	13	MIN	.8						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

DAY	OCT	WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 SUMMATION VALUES										SEP
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1	82	66	259	119	•4	•4	119	114	•4	44	107	---
2	105	177	82	126	•4	•4	62	99	•4	60	---	---
3	47	126	92	105	•4	•4	98	126	•4	70	---	---
4	---	69	149	87	•4	•4	102	63	•4	46	61	---
5	---	131	155	168	5.0	•4	81	105	•4	66	66	---
6	---	163	137	149	•5	•4	184	83	•4	73	69	---
7	74	---	172	64	•4	•4	174	47	•4	79	62	---
8	85	137	123	65	•4	•4	98	175	•4	84	98	---
9	88	108	120	---	•4	•4	2.2	79	•4	63	37	---
10	---	---	89	---	•4	•4	7.3	99	---	63	87	---
11	---	---	157	---	•4	•4	117	55	•4	51	74	---
12	---	---	121	130	•4	•4	55	72	•4	44	50	---
13	---	91	74	62	•4	•4	•4	153	•4	35	76	---
14	---	131	59	85	•4	•4	•4	•4	•4	66	50	---
15	---	125	103	133	•4	•4	3.5	•4	•4	100	73	---
16	176	129	126	119	•4	•4	•4	•4	•4	---	85	74
17	73	83	101	118	•4	•4	16	---	---	---	130	95
18	---	47	176	94	•4	•4	4.2	---	---	---	108	---
19	---	120	93	66	---	•4	•4	---	---	---	105	---
20	---	103	61	80	•4	•4	•4	111	---	92	---	---
21	---	73	85	117	•4	•4	•5	45	---	82	---	---
22	106	90	130	37	•4	•4	•4	74	---	53	---	---
23	127	---	156	78	•4	•4	•4	90	---	44	---	---
24	185	---	70	---	•4	•4	•7	118	---	33	---	---
25	107	---	107	---	•4	•4	.6	72	---	44	---	---
26	---	196	74	---	•4	•4	•4	78	---	76	---	---
27	---	178	54	---	•4	•4	•4	113	---	---	---	---
28	---	218	97	---	•4	•4	3.5	76	---	101	---	---
29	---	204	94	---	---	---	4	52	---	104	---	---
30	---	181	159	---	---	---	4	104	---	110	---	---
31	78	---	151	---	---	4	4	112	---	102	---	---

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 SUMMATION VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	—	50	261	138	•4	88	73	—	107	46	—	109
2	—	39	122	125	37	145	192	—	31	63	50	108
3	—	58	96	114	131	—	381	—	89	87	52	67
4	—	104	182	279	127	—	178	—	126	44	63	30
5	—	101	60	166	103	89	220	—	77	44	64	32
6	—	166	116	134	97	91	216	—	45	81	78	31
7	—	45	158	166	145	166	97	—	71	94	78	45
8	—	95	—	152	60	143	126	—	60	41	77	72
9	—	138	146	219	161	168	157	—	74	42	70	44
10	—	70	128	281	44	186	119	—	114	99	36	52
11	—	60	52	190	62	156	54	—	27	—	64	47
12	—	79	59	53	87	152	166	—	38	35	49	52
13	—	71	71	77	119	217	177	—	56	39	43	63
14	—	47	75	81	200	106	103	—	63	33	41	69
15	—	50	103	98	133	142	133	—	145	42	29	51
16	—	—	64	237	116	223	191	—	81	—	54	56
17	—	—	169	120	153	82	220	—	36	—	61	62
18	—	—	133	97	78	118	77	—	49	—	78	85
19	—	177	68	71	121	255	112	107	83	—	40	50
20	—	—	—	74	138	101	186	86	120	—	68	70
21	—	—	—	—	106	—	192	86	83	57	—	78
22	—	44	—	—	177	—	109	68	144	119	—	89
23	—	80	—	—	283	—	70	91	60	72	—	47
24	—	81	—	—	196	152	99	—	49	46	—	71
25	—	117	—	—	162	167	154	—	68	41	—	93
26	—	—	261	—	54	143	151	—	80	31	—	37
27	—	156	—	—	188	173	102	—	86	61	—	55
28	—	21	74	—	164	98	61	—	74	61	—	92
29	—	69	50	—	90	—	130	—	88	60	—	42
30	—	86	145	—	190	—	322	—	74	100	—	24
31	—	53	—	157	64	—	181	—	103	—	—	51

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

DAY	OCT	WIND SPEED, IN MILES PER HOUR, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 SUMMATION VALUES										SEP
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1	20	168	88	---	---	---	---	---	---	---	---	---
2	40	115	190	---	---	---	---	---	---	---	---	---
3	25	---	118	---	---	---	---	---	---	---	---	---
4	42	106	87	---	---	---	---	---	---	---	---	---
5	28	121	234	---	---	---	---	---	---	---	---	---
6	80	63	140	---	---	---	---	---	---	---	---	---
7	56	149	35	---	---	---	---	---	---	---	---	---
8	35	92	90	---	---	---	---	---	---	---	---	---
9	129	44	95	---	---	---	---	---	---	---	---	---
10	---	107	112	---	---	---	---	---	---	---	---	---
11	---	196	144	---	---	---	---	---	---	---	---	---
12	---	301	80	---	---	---	---	---	---	---	---	---
13	66	110	131	---	---	---	---	---	---	---	---	---
14	103	121	233	---	---	---	---	---	---	---	---	---
15	98	56	147	---	---	---	---	---	---	---	---	---
16	68	75	131	---	---	---	---	---	---	---	---	---
17	55	---	---	---	---	---	---	---	---	---	---	---
18	92	86	---	---	---	---	---	---	---	---	---	---
19	144	86	---	---	---	---	---	---	---	---	---	---
20	197	207	---	---	---	---	---	---	---	---	---	---
21	44	148	---	---	---	---	---	---	---	---	---	---
22	54	70	---	---	---	---	---	---	---	---	---	---
23	77	132	---	---	---	---	---	---	---	---	---	---
24	72	136	---	---	---	---	---	---	---	---	---	---
25	44	36	---	---	---	---	---	---	---	---	---	---
26	27	63	---	---	---	---	---	---	---	---	---	---
27	48	149	---	---	---	---	---	---	---	---	---	---
28	145	181	---	---	---	---	---	---	---	---	---	---
29	121	113	---	---	---	---	---	---	---	---	---	---
30	72	135	---	---	---	---	---	---	---	---	---	---
31		118	---	---	---	---	---	---	---	---	---	---

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

RELATIVE HUMIDITY IN PERCENT, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78.7	61.0	88.5	79.1	---	84.0	28.5	69.2	74.9	---	63.6	72.1
2	81.6	58.7	77.0	72.6	---	72.4	37.1	64.7	71.2	---	65.5	---
3	78.0	74.9	78.6	59.8	---	---	53.0	57.9	72.9	---	72.2	---
4	---	67.7	74.6	68.8	---	90.8	74.3	56.2	71.1	---	68.4	70.9
5	---	73.4	81.8	83.0	77.0	83.8	75.1	84.0	75.9	---	73.9	65.4
6	---	66.2	94.3	75.4	78.0	78.1	53.3	73.9	69.1	---	74.2	66.8
7	76.8	---	90.6	83.3	83.5	68.3	38.6	53.7	52.5	---	65.8	67.4
8	74.5	64.4	96.6	90.2	66.7	73.6	53.5	59.7	64.6	---	70.1	63.0
9	67.2	67.7	94.0	---	65.8	75.7	56.3	81.0	63.2	---	68.0	58.4
10	---	---	92.6	---	91.5	69.7	73.8	83.7	---	---	70.3	62.9
11	---	---	89.9	---	77.1	77.8	81.8	82.5	66.3	---	65.6	64.5
12	---	---	90.6	75.8	64.1	59.5	77.4	67.6	74.6	---	66.8	64.2
13	---	67.8	87.7	96.3	57.6	48.6	76.5	---	72.4	---	68.0	63.1
14	---	96.3	94.3	93.4	64.0	60.2	64.1	---	---	---	68.2	71.2
15	---	81.8	89.8	84.9	72.3	71.0	43.6	---	---	---	72.4	65.5
16	84.9	92.2	85.1	74.5	94.2	58.9	68.5	---	---	---	75.8	66.8
17	79.4	89.1	88.7	61.7	98.5	48.7	73.4	---	---	---	64.5	71.3
18	---	88.4	53.2	78.7	99.6	47.4	49.6	---	---	---	62.8	---
19	---	88.0	59.5	81.9	---	82.9	81.6	---	---	---	58.2	---
20	---	82.1	60.7	96.8	78.0	74.0	70.0	44.9	---	---	59.6	---
21	---	74.2	67.7	97.0	78.5	58.1	48.3	58.0	---	---	61.0	---
22	53.9	88.1	82.7	94.8	65.6	51.6	80.3	59.0	---	---	62.6	---
23	84.9	---	93.0	72.1	91.1	50.1	63.3	64.0	---	---	65.2	---
24	77.9	---	76.3	---	75.2	48.5	67.6	74.0	---	---	63.9	---
25	72.5	---	84.6	---	66.9	44.4	66.7	68.6	---	---	65.5	---
26	---	98.1	85.8	---	63.1	57.8	55.9	81.0	---	---	64.3	---
27	---	97.1	77.3	---	63.9	66.3	57.3	79.3	---	---	71.6	---
28	---	82.6	91.1	---	79.7	44.7	66.8	67.5	---	---	68.1	---
29	---	76.5	90.0	---	---	62.5	78.0	68.3	---	---	69.1	---
30	---	80.4	96.5	---	---	70.7	78.1	76.6	---	---	66.8	---
31	61.4	---	94.0	---	---	49.5	---	61.9	---	---	---	---
MEAN	74.7	79.0	84.1	81.0	76.2	64.3	63.1	68.2	69.1	---	67.1	66.2
WTR YR 1981	MEAN	72.0	MAX	99.6	MIN	28.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

RELATIVE HUMIDITY IN PERCENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	68.1	63.3	67.0	68.3	55.7	36.6	---	52.3	50.8	---	66.8		
2	67.5	69.4	68.8	69.9	61.7	42.6	---	50.5	57.1	52.8	52.7		
3	61.5	70.3	84.7	70.1	---	45.3	---	53.6	59.4	51.6	37.2		
4	63.7	70.6	65.9	60.9	---	41.9	---	59.6	61.1	49.1	41.2		
5	68.0	67.2	57.6	69.1	62.8	60.0	---	53.2	52.2	56.4	45.4		
6	60.2	60.8	63.2	56.8	67.7	56.3	---	45.4	54.0	55.5	51.3		
7	59.7	67.5	62.6	56.2	62.9	50.5	---	58.3	54.3	51.9	50.4		
8	57.6	---	56.9	55.0	55.4	65.8	---	62.6	57.5	51.8	47.6		
9	61.0	58.2	52.2	61.9	62.1	65.1	---	63.4	62.0	42.0	49.4		
10	67.3	59.4	47.1	54.7	65.8	56.6	---	45.1	57.8	57.3	46.7		
11	69.4	64.8	54.6	52.6	64.2	43.7	---	47.8	---	51.0	46.2		
12	54.9	63.5	67.1	61.3	67.5	40.6	---	56.5	51.3	38.7	50.5		
13	52.7	65.9	68.2	68.0	46.7	47.5	---	46.7	57.6	45.0	56.1		
14	55.1	65.8	70.2	60.8	49.5	38.9	---	38.0	50.9	45.9	51.6		
15	61.4	63.4	69.5	65.6	68.7	28.0	---	48.3	50.5	47.2	59.3		
16	---	64.5	57.8	84.2	58.4	57.3	---	69.8	---	52.3	43.3		
17	---	71.9	52.8	71.4	63.3	51.1	---	58.0	---	49.9	42.6		
18	---	68.8	50.6	77.3	61.2	38.1	---	55.8	---	37.2	42.0		
19	58.6	68.8	67.5	72.5	68.5	44.8	54.6	56.1	---	43.0	39.8		
20	---	---	69.8	66.6	63.1	41.3	56.0	51.0	---	50.2	46.3		
21	---	70.0	---	74.2	---	58.2	32.0	64.4	44.7	---	39.6	39.7	
22	72.5	---	54.2	---	58.6	34.3	55.6	53.9	---	46.7	44.5		
23	75.0	---	53.4	67.1	45.8	33.6	57.8	40.8	---	56.0	41.5		
24	69.7	---	65.7	58.6	64.2	---	55.8	39.8	---	63.9	53.7		
25	63.7	---	58.5	69.6	---	59.1	53.0	44.9	---	43.3	61.0		
26	63.8	---	61.4	48.0	60.7	---	55.9	50.5	---	55.6	47.5		
27	66.0	---	43.8	38.6	48.6	---	58.8	55.4	---	57.3	47.3		
28	59.1	69.9	---	48.8	44.8	42.9	---	58.0	64.1	---	43.2	44.0	
29	51.2	64.2	---	52.4	---	29.0	---	64.8	61.9	---	40.1	33.4	
30	59.7	69.6	---	72.4	---	35.6	---	56.5	45.4	---	55.4	33.3	
31	63.7	---	58.5	69.6	---	35.6	---	65.4	---	62.2	---		
MEAN	58.4	64.3	65.4	62.1	62.4	57.2	45.7	58.2	52.4	55.5	49.7	47.1	
WTR YR 1982	MEAN	56.0	MAX	84.7	MIN	28.0							

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

RELATIVE HUMIDITY IN PERCENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.3	15.9	92.7	---	---	---	---	---	---	---	---	---
2	17.0	17.2	88.2	---	---	---	---	---	---	---	---	---
3	17.2	---	93.0	---	---	---	---	---	---	---	---	---
4	16.0	83.0	92.9	---	---	---	---	---	---	---	---	---
5	16.6	81.5	86.2	---	---	---	---	---	---	---	---	---
6	15.5	78.1	88.7	---	---	---	---	---	---	---	---	---
7	17.3	53.6	85.2	---	---	---	---	---	---	---	---	---
8	18.5	54.1	85.3	---	---	---	---	---	---	---	---	---
9	17.4	58.2	85.7	---	---	---	---	---	---	---	---	---
10	---	62.0	95.3	---	---	---	---	---	---	---	---	---
11	---	79.8	87.3	---	---	---	---	---	---	---	---	---
12	---	86.2	73.8	---	---	---	---	---	---	---	---	---
13	19.3	79.5	74.7	---	---	---	---	---	---	---	---	---
14	18.2	83.2	87.2	---	---	---	---	---	---	---	---	---
15	17.5	76.3	97.9	---	---	---	---	---	---	---	---	---
16	19.0	77.1	95.1	---	---	---	---	---	---	---	---	---
17	19.0	---	93.9	---	---	---	---	---	---	---	---	---
18	17.2	93.9	94.2	---	---	---	---	---	---	---	---	---
19	16.3	94.2	94.1	---	---	---	---	---	---	---	---	---
20	19.2	94.1	---	---	---	---	---	---	---	---	---	---
21	21.5	94.0	---	---	---	---	---	---	---	---	---	---
22	20.7	94.5	---	---	---	---	---	---	---	---	---	---
23	20.2	97.6	---	---	---	---	---	---	---	---	---	---
24	19.6	88.5	---	---	---	---	---	---	---	---	---	---
25	19.1	90.1	---	---	---	---	---	---	---	---	---	---
26	19.4	95.5	---	---	---	---	---	---	---	---	---	---
27	18.4	91.7	---	---	---	---	---	---	---	---	---	---
28	16.0	91.4	---	---	---	---	---	---	---	---	---	---
29	17.2	94.5	---	---	---	---	---	---	---	---	---	---
30	19.8	90.7	---	---	---	---	---	---	---	---	---	---
31	17.7	---	---	---	---	---	---	---	---	---	---	---
MEAN	18.1	78.4	88.1	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	57.1	MAX	97.9	MIN	15.5						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

SOIL TEMPERATURE IN DEGREES CELSIUS, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.1	7.3	1.1	2.7	6.2	12.8	16.3	20.4	23.3	25.5	24.5
2	---	9.9	4.3	1.1	1.6	5.2	12.1	16.2	21.2	21.7	25.9	20.7
3	11.3	10.6	4.0	.9	-1.0	3.9	13.0	16.3	22.0	20.9	25.5	19.1
4	8.3	9.8	6.2	.6	-4.5	4.7	14.0	17.0	22.7	19.5	25.8	23.8
5	9.2	8.6	8.7	.5	.3	4.6	10.7	17.6	23.1	20.3	25.9	23.8
6	10.9	10.5	10.2	.5	.3	3.5	10.1	16.3	22.9	21.1	25.5	23.9
7	15.5	15.0	9.5	.5	.3	3.2	11.0	15.7	22.4	22.8	26.0	22.9
8	17.8	12.5	9.2	.5	.3	3.5	12.2	16.3	22.1	24.3	24.9	22.7
9	20.9	11.2	6.6	-5.3	.2	3.9	14.3	17.3	23.4	24.9	24.8	21.5
10	20.0	11.3	5.4	-5.6	.3	5.2	14.4	16.5	23.0	24.8	25.1	21.0
11	17.0	7.4	6.0	-6.1	.3	4.6	16.3	12.5	22.4	25.0	25.3	21.9
12	14.2	7.5	5.9	.3	-0.1	4.9	16.8	13.2	22.0	24.6	24.7	22.5
13	11.5	9.6	4.3	-0.4	-0.1	6.3	17.4	10.9	22.3	25.5	24.8	23.2
14	13.8	9.1	4.9	.4	.1	5.7	16.7	13.1	23.6	25.2	25.1	22.8
15	16.3	7.9	4.8	.4	.2	5.4	14.6	13.7	23.9	23.1	24.7	22.4
16	16.7	6.9	3.1	-0.4	.3	5.7	13.8	15.0	22.2	22.0	24.8	20.1
17	15.9	6.1	3.7	.3	.3	5.7	16.1	15.9	21.1	21.4	24.4	17.4
18	14.4	5.5	1.9	.3	.5	5.3	17.1	14.4	19.8	22.8	24.2	12.7
19	10.8	5.2	1.4	.4	.8	4.1	15.8	14.2	20.3	22.4	24.9	13.6
20	11.4	5.6	.3	.4	6.2	3.7	14.5	14.8	21.4	22.5	25.0	15.8
21	11.7	5.1	1.0	.4	6.3	4.9	13.6	16.6	20.9	21.3	24.9	18.1
22	13.7	6.3	.9	.4	7.1	5.6	14.3	17.7	21.5	21.3	25.4	17.3
23	13.6	6.1	.9	-0.4	5.2	5.9	15.4	18.6	21.2	19.5	25.2	16.6
24	11.0	5.4	.9	6.7	5.0	6.9	13.0	19.2	22.9	20.3	25.4	15.8
25	8.3	4.1	.8	9.1	5.8	7.7	13.2	19.4	22.4	20.8	26.0	17.2
26	4.7	4.3	.8	9.6	6.3	9.6	15.9	19.5	22.6	21.7	25.7	19.6
27	5.1	4.0	.7	8.3	6.6	11.2	18.1	18.8	20.9	21.7	22.4	19.6
28	5.5	4.2	.8	5.3	8.5	11.3	17.3	19.5	21.5	20.6	24.4	18.3
29	6.2	4.6	.8	2.2	---	12.1	18.2	20.6	22.7	19.7	24.7	14.7
30	7.4	7.0	.9	.7	---	12.3	17.0	21.0	23.6	19.0	24.8	16.5
31	9.2	---	1.0	1.6	---	12.7	---	20.5	---	19.4	25.5	---
MEAN	12.2	7.7	3.8	1.1	2.4	6.3	14.7	16.6	22.1	22.0	25.1	19.7
WTR YR 1981	MEAN	12.9	MAX	26.0	MIN	-6.1						

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

SOIL TEMPERATURE IN DEGREES CELSIUS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.4	14.5	6.5	.6	-0.2	4.5	10.7	15.8	20.8	22.1	21.9	21.1
2	16.3	15.1	5.3	.6	-0.2	4.5	11.6	16.8	20.4	21.7	24.2	21.8
3	13.6	15.1	4.9	2.5	-0.2	6.4	9.4	18.4	21.4	22.7	25.2	20.6
4	12.6	15.2	5.0	3.1	-0.2	6.8	7.3	19.4	19.8	24.1	25.6	20.2
5	16.5	14.3	4.1	.8	-0.2	2.2	7.3	20.8	20.9	25.2	25.7	19.8
6	17.3	11.7	3.4	1.9	-0.2	2.1	4.8	21.6	21.5	25.6	25.9	19.8
7	16.5	10.1	4.6	1.6	-0.2	1.5	4.3	19.3	20.7	25.1	26.1	20.2
8	13.9	10.5	6.3	.4	-0.3	.9	4.3	18.4	21.4	24.8	25.4	20.5
9	13.3	11.2	3.3	.2	-0.2	1.0	3.4	17.5	22.1	25.0	24.3	21.1
10	13.3	8.5	2.4	-0.8	-0.3	5.2	4.2	19.5	22.2	24.7	21.9	21.6
11	14.4	8.6	2.3	-2.4	-0.2	7.4	6.0	21.0	21.3	21.7	21.7	22.1
12	14.8	8.7	2.0	-1.6	-0.2	7.0	7.0	21.6	21.1	23.5	21.5	22.1
13	16.4	8.6	2.0	-0.7	-0.2	8.9	11.1	22.6	21.4	24.0	21.8	22.5
14	15.5	8.4	3.1	-0.9	-0.2	7.6	11.5	22.8	21.3	24.4	22.1	22.9
15	14.9	8.2	3.0	-0.8	-0.2	7.2	12.4	22.4	21.4	25.0	22.5	20.5
16	13.8	11.8	1.4	-1.5	-0.2	10.2	14.0	22.5	20.3	24.2	23.2	21.2
17	14.6	11.6	1.9	-1.0	-0.2	11.0	13.4	22.5	19.7	24.5	23.6	20.0
18	15.1	10.8	1.8	-0.8	-0.2	11.3	11.9	22.4	20.7	23.7	23.5	20.1
19	13.0	10.3	1.1	-0.5	-0.1	10.5	12.2	20.3	21.1	23.5	22.6	18.4
20	13.9	8.4	-7.4	-0.4	-0.1	11.2	13.1	20.9	20.0	22.8	22.4	17.6
21	13.6	5.3	-4.1	-0.3	4.4	9.7	11.6	20.7	20.7	23.1	22.9	16.4
22	13.3	3.9	-0.8	-0.3	6.5	7.6	12.0	20.7	21.0	22.2	21.1	15.4
23	10.0	4.0	1.9	-0.3	7.7	8.3	12.0	19.5	21.2	22.0	21.4	14.9
24	6.0	5.4	1.4	-1.6	4.6	9.4	14.1	19.6	21.4	22.0	21.0	15.9
25	7.4	5.8	1.7	-1.0	3.2	8.5	14.2	20.3	21.7	22.9	21.6	15.6
26	8.7	8.2	2.0	-1.1	2.5	5.1	15.4	21.2	22.5	23.7	20.4	15.9
27	10.3	7.8	3.1	-0.9	3.2	5.4	13.7	21.0	23.0	22.9	21.3	16.0
28	10.4	6.4	2.5	-0.3	4.1	5.9	14.1	21.0	22.6	22.5	21.1	15.8
29	11.9	5.9	.5	-0.3	---	6.8	13.7	20.5	23.0	21.7	20.7	17.1
30	12.8	4.7	.2	-0.3	---	9.4	14.3	21.7	24.0	22.0	20.6	17.8
31	13.6	---	.5	-0.2	---	11.4	---	22.2	---	22.0	21.2	---
MEAN	13.4	9.3	2.1	-0.2	1.2	6.9	10.5	20.5	21.3	23.4	22.7	19.2
WTR YR 1982	MEAN	12.6	MAX	26.1	MIN	---	7.4	---	---	---	---	---

Table 9.--Data collected at climatological station 391253087021001 near Daggett, Owen County, Indiana--Continued

SOIL TEMPERATURE IN DEGREES CELSIUS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.3	13.9	9.3	---	---	---	---	---	---	---	---	---
2	18.4	14.6	12.0	---	---	---	---	---	---	---	---	---
3	18.3	---	13.0	---	---	---	---	---	---	---	---	---
4	18.7	8.3	12.5	---	---	---	---	---	---	---	---	---
5	18.9	6.1	12.5	---	---	---	---	---	---	---	---	---
6	19.0	5.8	9.0	---	---	---	---	---	---	---	---	---
7	19.1	6.9	6.7	---	---	---	---	---	---	---	---	---
8	18.2	8.7	6.1	---	---	---	---	---	---	---	---	---
9	19.3	9.3	4.6	---	---	---	---	---	---	---	---	---
10	---	9.7	3.8	---	---	---	---	---	---	---	---	---
11	---	11.3	3.5	---	---	---	---	---	---	---	---	---
12	---	10.2	1.2	---	---	---	---	---	---	---	---	---
13	14.0	5.5	.3	---	---	---	---	---	---	---	---	---
14	13.5	5.0	.9	---	---	---	---	---	---	---	---	---
15	13.2	4.0	3.7	---	---	---	---	---	---	---	---	---
16	12.5	3.8	2.7	---	---	---	---	---	---	---	---	---
17	11.8	---	---	---	---	---	---	---	---	---	---	---
18	12.3	6.6	---	---	---	---	---	---	---	---	---	---
19	12.9	9.0	---	---	---	---	---	---	---	---	---	---
20	11.5	10.8	---	---	---	---	---	---	---	---	---	---
21	9.2	11.3	---	---	---	---	---	---	---	---	---	---
22	8.8	10.2	---	---	---	---	---	---	---	---	---	---
23	8.6	10.2	---	---	---	---	---	---	---	---	---	---
24	8.6	5.8	---	---	---	---	---	---	---	---	---	---
25	8.8	3.7	---	---	---	---	---	---	---	---	---	---
26	9.0	4.6	---	---	---	---	---	---	---	---	---	---
27	9.3	4.6	---	---	---	---	---	---	---	---	---	---
28	10.7	5.5	---	---	---	---	---	---	---	---	---	---
29	11.3	6.2	---	---	---	---	---	---	---	---	---	---
30	11.1	6.8	---	---	---	---	---	---	---	---	---	---
31	12.9	---	---	---	---	---	---	---	---	---	---	---
MEAN	13.5	7.8	6.4	---	---	---	---	---	---	---	---	---
WTR YR 1983	MEAN	9.7	---	MAX	19.3	MIN	.3					